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FOR ENQUIRING INTO

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TRANSACTIONS

OF THE

ASIATIC SOCIETY.

I.

An Essay on the Hindu History of Cashmir.

By HORACE HAYMAN WILSON, Esq. Sec. A. S.

INTRODUCTION.

THE only Sanscrit composition yet discovered, to which the title of History, can with any propriety be applied, is the *Rájá Taringiní*, a history of Cashmir. This work was first introduced to the knowledge of the Mohammedans by the learned minister of Acber, Abulfazl, but the summary which he has given of its contents, was taken as he informs us from a Persian translation of the Hindu original, prepared by order of Acber. The example set by that liberal Monarch, introduced amongst his successors, and the literary men of their reigns, a fashion of remodelling, or retranslating the same work, and continuing the History of the Province, to the periods at which they wrote.

The earliest work of this description, after that which was prepared by order of ACBER, is one mentioned by BERNIER, who states an abridged translation of the *Rájá Taringiní* into Persian, to have been made, by command of JEHANGIR; he adds, that he was engaged upon rendering this into French, but we have never heard any thing more of his translation: at a subsequent period, mention is made in a later composition, of two similar works, by MULLA HUSEIN, *Kári*, or the *reader*, and by HYDER MALEC, *C'hadwaria*,* whilst the work, in which this notice occurs, the *Wakiat-i-Cashmir* was written in the time of MOHAMMED SHAH, as was another History of the Province, entitled the *Nawádir-ul-Akhbár*. The fashion seems to have continued to a very recent date, as GHULAM HUSEIN† notices the composition of a History of *Cashmir* having been entrusted to various learned men, by order of JIVANA the *Sic'h*, then Governor of the Province, and we shall have occasion to specify one History of as recent a date, as the reign of SHAH-ALEM.

The ill directed and limited enquiries of the first European settlers in India, were not likely to have traced the original of these Mohammedan compositions, and its existence was little adverted to, until the translation of the *Ayin Acberi* by the late MR. GLADWIN was published. The abstract then given naturally excited curiosity, and stimulated enquiry, but the result was unsatisfactory, and a long period intervened before the original work was discovered.‡ SIR WM. JONES was unable to meet with it, although the history of India from the *Sanscrit-Cashmir* authorities, was amongst the tasks his undaunted and indefatigable intellect had planned, and it was not until the year 1805, that MR. COLEBROOKE§ was successful in his search. At that time he procured a copy of the work from the heirs of a *Brahman*, who died in Calcutta, and about the same time, or shortly afterwards, another transcript of the *Rájá Taringiní* was obtained by the late MR. SPEKE from

* A summary taken from this work, and which appears to have been the one alluded to by BERNIER, is given in the *Description de l'Inde* from TIEFFENTHALER (1. 89.)

† Seir Mutakherin—3. 210. ‡ A. R. i. 431; and iv. 188. § A. R. ix. 294.

Lucknow. To these two copies I have been able to add a third, which was brought for sale in Calcutta; and I have only to add, that both in that city and at Benares, I have been hitherto unable to meet with any other transcript of this curious work.

The *Rájá Taringiní* has hitherto been regarded as one entire composition: it is however in fact a series of compositions, written by different authors, and at different periods; a circumstance that gives greater value to its contents, as with the exception of the early periods of the history, the several authors may be regarded almost as the chroniclers of their own times. The first of the series is the *Rájá Taringiní* of CALHAŃA PAŃDIT, the son of CHAMPACA, who states his having made use of earlier authorities, and gives an interesting enumeration of several which he had employed. The list includes the general works of SUVRATA and NARÉNDRA; the History of GONERDA and his three successors, by HÉLA RÁJÁ, an *Ascetic*; of LAVA, and his successors to AŚOCA, by PADMA MIHIRA; and of AŚOCA and the four next princes by ŚRÍ CH'HAVILLACÁRA. He also cites the authority of NILA MUNI, meaning probably the *Níla Puráńa*, a Purana known only in CASHMIR; the whole forming a remarkable proof of the attention bestowed by Cashmirian writers upon the history of their native country: an attention the more extraordinary, from the contrast it affords, to the total want of historical enquiry in any other part of the extensive countries peopled by the Hindus. The history of CALHAŃA commences with the fabulous ages, and comes down to the reign of SANGRÁMA DÉVA, the nephew of DIDDÁ RÁNÍ, in *Śaca* 949 or A. D. 1027, approaching to what appears to have been his own date, *Śaca* 1070 or A. D. 1148.

The next work is the *Rájávalí* of JONA RÁJÁ, of which I regret to state I have not yet been able to meet with a copy. It probably begins where CALHAŃA stops, and it closes about the time of ZEIN UL ÁB-AD-DÍN, or the year of the *Hijra* 815, as we know from the next of the series.

The *Śrí Jaina Rájá Taringiní* is the work of ŚRÍ VARA PAŃDITA, the pu-

pil of *Jona Rájá,* whose work it professes to continue, so as to form with it, and the history of CALHAŃA, a complete record of the Kingdom of *Cashmir.* It begins with ZEIN UL ÁB-ED-DÍN, whose name the unprepared reader would scarcely recognise, in its *Nágarí* transfiguration, of *Srí Jaina Ollábha Dína,* and closes with the accession of *Fatteh Shah,* in the year of the Hijra 882, or A. D. 1477. The name which the author has chosen to give his work of *Jaina Taringiní* has led to a very mistaken notion of its character: it has been included amongst the productions of *Jaina* literature, whilst in truth the author is an orthodox worshipper of ŚIVA, and evidently intends the epithet he has adopted as complimentary to the memory of ZEIN UL ÁB-ED-DÍN, a prince who was a great friend to his Hindu subjects, and a liberal patron of Hindu letters, and literary men.

The fourth work, which completes the aggregate current under the name of *Rájá Taringiní,* was written in the time of ACBER, expressly to continue to the latest date, the productions of the author's predecessors, and to bring the history down to the time at which Cashmir became a province of ACBER's empire. It begins accordingly where ŚRÍ VARA ended, or with FATTEH SHAH, and closes with NAZEK-SHAH; the historian apparently, and judiciously, avoiding to notice the fate of the kingdom during HAMAYUN's retreat into Persia. The work is called the *Rájá valí Patácá,* and is the production of PUŃYA or PRÁJŃYA BHAŤŤA.

Of the works thus described, the manuscript of MR. SPEKE, containing the compositions of CALHAŃA and ŚRÍ VARA, came into my possession at the sale of that gentleman's effects. Of Mr. COLEBROOKE's manuscript, containing also the work of PUŃYA BHAŤŤA, I was permitted by that gentleman, with the liberality I have had former occasion to acknowledge, to have a transcript made; and the third manuscript, containing the same three works, I have already stated I procured by accidental purchase. Neither of the three comprises the work of JONA RÁJÁ, and but one of them, the transcript of Mr. COLEBROOKE's manuscript, has the third *Tarang* or section of CALHAŃA's history.

The three manuscripts are all very inaccurate ; so far so indeed, that a close translation of them, if desirable, would be impracticable. The leading points, however, may be depended upon, agreeing not only in the different copies, but with the circumstances narrated in the Compendium of ABULFAZL, and in the Mohammedan or Persian histories which I have been able to procure.

The Persian works which I have consulted are the following: the *Nawâdir-ul Akhbar,* the work of REFIUDDÍN MOHAMMED, the *Wakiat-i-Cashmir* by MOHAMMED AZIM, the *Tarikh Cashmir* of NARAYAN CUL, and the *Goheri Alem Tohfet us shahi,* by BADIA UD-DIN. The first of these authors has the advantage of being a *Cashmirian* by birth, although descended of a *Balkh* family. He alludes to the work of CALHAŃA PAŃDIT, which he avows his purpose of correcting where at variance with the true faith ; and it must be acknowledged, that he has altered without remorse, although it may be questioned, whether he has corrected. His chief disagreements are those of omission however, as in the Hindu portion of his history, he occasionally passes over whole dynasties, and connects the disjuncta membra of his original, with very little regard to accuracy of time or descent. The date of his work is 1183 of the Hijra, in the reign of MOHAMMED SHAH.

The *Wakiat-i-Cashmir* contains a much fuller account of the Province, and is a closer approximation to the Hindu original. The History follows the order of the Sanscrit work very regularly, but the work is not confined to the History of *Cashmir,* two of the three portions into which it is divided being appropriated to the description of the country, its natural and artificial curiosities, and the religious and literary characters it has given birth to since the establishment of *Islam.* MOHAMMED AZIM, the author, calls himself the son of KHEIR-UZ-ZEMAN KHAN, and writes in the year of the Hijra 1140: living therefore, as well as RAFI-AD-DIN, in the Reign of MOHAMMED SHAH. The same reign produced the third work, which is professedly a translation of the *Rájá Taringiní.* It has all the usual defects of oriental translation, and follows the original with a whimsical interchange of fidelity and variation ;

some passages, especially those of a legendary character, being minutely given, whilst others of more historical importance are imperfectly rendered or altogether omitted. The author, NÁRÁYAN CUL, was a Hindu *Brahman*, and a native of *Cashmir*.

The last work enumerated is of very modern date, having been written in the time of the last SHAH ALEM: the author BEDIA-UD-DIN was the son of MOHAMMED AZIM, the author of the *Wakiat*, whose omissions he purposes to supply, from authorities peculiarly his own, and of which he had subsequently become possessed. He particularly specifies the *Núr Námah*, an ancient history of Cashmir, written by SHEIKH NÚR-AD-DIN WALI in the Cashmirian language, and rendered into Persian by MOULAVI AHMED ALMEH, in the reign of ZEIN UL AB-AD-DIN. A copy of this the author had procured from one of the descendants of the last independant princes of *Cashmir*, who were settled as private individuals in *Akberabad* or *Agra*; and it is to be presumed that to this work BEDIA-UD-DIN owes the extraordinary additions which he has made occasionally to the labours of his predecessors, and their common original. None of the works above particularised, offer much valuable illustration of the Sanscrit original history; nor do they furnish any additions of historical importance. As well as the summary of ABULFAZL however they are very useful in corroborating or explaining many parts of the Sanscrit text, whilst they do comprise a few additional circumstances, which are curious at least in their origin and character, although very questionable in point of probability or truth. The chief value of these works, however, is the notice they take, of the comparatively modern condition of many towns and temples, the foundation of which is commemorated by the Hindu writers, and the existence of which at all, cannot perhaps now be verified, except upon the testimony of these *Mohammedan* authors; the short interval that has elapsed since their days, having been sufficient to sweep away the vestiges of antiquity, which in their time continued to bear witness to the public spirit, and munificence, of the Hindu Sovereigns of *Cashmir*.

In the utter darkness which envelopes the history of India previous to the

Musselman invasion, the appearance of such a record as that furnished us by the Cashmirian writers acquires an importance, not otherwise derived from the value of the record itself, nor the character of the transactions it commemorates. Its being the sole luminary, however, of the gloomy interval alluded to, renders us naturally curious to follow the track it singly serves to light, and the history of Cashmir, has accordingly attracted the attention of those best competent to have prosecuted the investigation. I have already stated it to be one of the Desiderata of Sir Wm. Jones; and at the time that Mr. Colebrooke announced the discovery of the manuscript, he also declared his intention of giving to the public an account of its contents. The execution of his purpose has probably been impeded by other more important labours, and the too contracted term of Sir Wm. Jones's splendid career, disappointed his hope of performing this, and greater undertakings. A more satisfactory account of the contents of the *Rájá Taringiní* than that furnished by Abulfazl is therefore still a desideratum, and in the little probability that now exists of the task being undertaken by living talent more adequate to its accomplishment, I have been induced to prepare, from it chiefly, the following sketch of the Hindu history of Cashmir.

The want of a copy of the connecting series of Jona Rájá, and the occupation of the works of Śrí Vara and Puńya Bhaťťa by *Musselman* transactions, will prevent me, at present at least, from extending the limits of my essay, beyond those of Calhańa Pandit, or following any other Hindu guide. His work as a historical composition is clear and consistent, and contains fewer extravagancies than most of the works to which the name of History has been assigned, by the unphilosophical and credulous natives of the East. Like the mass of the Hindu compositions on all subjects, it is written in verse, and as a poem, it contains many passages of merit, both in sentiment and style. The summary of its contents given by Abulfazl is too concise to be of much service, and in the transformation of names occasioned by the difficulty of expressing the *Nagarí* alphabet in Persian characters, excites not unfrequently a doubt, whether the persons named were possessed of

Hindu appellations. Farther, it is in many places inaccurate, and it does not therefore preclude a necessity, for some such fuller account of the *Rájá Taringiní* and its contents, as is attempted in the essay now submitted to the Society, and which, whilst it follows the order and authority of CALHAŃA PANDIT, proposes to comprehend such occasional illustration of his history of *Cashmir*, as may be derived from the Mohammedan writers above mentioned, or from classical authorities, or more modern investigation.

AN ESSAY ON THE HINDU HISTORY OF CASHMIR.

THE Hindu History of *Cashmir* commences with the statement, that the beautiful valley forming that kingdom was originally a vast Lake, called *Satísaras*,* and this assertion has not only been copied by the Mohammedan writers, but it agrees with the local traditions of the Country, and as

* सती, a virtuous woman, and सरस, a Lake; the original does not give the etymology, but *Abulfazl* makes it the Lake of UMA, the wife of MAHÁDÉO, one of whose names, it is true, is SATI in the character of a virtuous spouse.

کشمیر نش از عمارت ستی سر نام داشت ستی نام زن است و سرنام حوض کلان

Wak. C. so *Abulfazl*, Gladwin's translation, ii. 169. *Bernier* says, les Histoires des anciens rois de Cachemire, veulent que tout ce pays n'ait eté autrefois qu'un grand Lac. And, according to *Forster*, the Legends of the country assert that *Solomon* visited the valley, and finding it covered, except one eminence, with a noxious water, which had no outlet, he opened a passage in the mountains, and gave to Cashmir its beautiful plains.

From the general concurrence of the Persian writers, with the account of the Hindu historians, must be excepted *Bedia ud-din:* he begins with the creation, and brings *Adam* from *Serandip*, where all Musselman authorities place him after the fall, to *Cashmir*. The sovereignty of Cashmir continued in the Line of *Seth* for 1110 years, when the Hindus conquered the Province under *Harinand Rájá*, and his family ruled it till the period of the deluge. After the flood, Cashmir was peopled by a tribe from Turkestan. The inhabitants were taught the worship of one God, by *Moses*, who died there, and whose tomb or place of sepulture is still to be seen in Cashmir. The relapse of the Cashmirians into the Hindu idolatry was punished by the local inundation of the province, and the solitary supremacy of the *Afrit*, *Jaladeo*, as described in the *Wakiat-i-Cashmir*. *See Appendix* No. I. These details are sufficient to give an idea of *Bedia ud-din's*, or probably of the *Sheikh Nur-ad-din's*, historical merits.

far as probability is regarded, has received the sanction of that able geographer Major Rennel.*

The draining of the water from the valley is ascribed, by the Hindu Historians to the Saint *Caśyapa*, the son of *Marichi*, the son of *Brahmá*, the *Cashef* or *Kasheb* of the Mohammedans, according to some of whom, he was not the *Hindu Seer*, but a *Deo* or *Genie*, the servant of *Suliman*, by whose orders he effected the desiccation of Cashmir. The method of doing this was opening a passage through the mountain at Baramouleh,† by which the water passed off; but the Hindu accounts do not specify the channel by which CAŚYAPA originally drained the Valley. As however it is not improbable that the Valley was really submerged, it is equally possible, as Bernier supposes,‡ that some natural convulsion rent the confining mountainous barrier, and opened to the waters, an outlet to the plains of the Punjab.

The district thus recovered by CAŚYAPA, was also it is said peopled by him, with the assistance of the superior deities, whom he brought from heaven for that purpose, at the beginning of the seventh or present *Manwantara*. We must of course subject *Cashmir* to the same periods of destruction and renovation, as the other parts of the universe, if we wish to reconcile this date with the usual chronology, but as this is not very indispensible, it has

* "So far am I from doubting the tradition respecting the existence of the Lake that covered *Cashmir*, that appearances alone would serve to convince me without either the tradition or the history."—*Memoir of a Map of Hindoostan*, 107.

† The *Wakiat-i-Cashmir* has another legend relative to the opening on this occasion of the Baramouleh pass, which is ascribed to VISHNU: the story is not worth quoting, except as a curious specimen of a Mohammedan disposition to enlarge upon Hindu fable: not a syllable of the legend is to be found in the Rájá Taringiní. See Appendix, No. 1.

‡ "Pour moi Je ne voudrois nier que toutè cette terre néut autrefois eté couverte d' eaux: on le dit bien de la Thessalie, et de quelques autres pays, mais J' ai de la peine a croire que cette ouverture soit l' ouvrage d'un homme parceque la montagne est tres large et tres haute. Je croirois plutot que quelque grand tremblement de terre, comme ces lieux y sont assez sujets, auroit fait ouvrir quelque caverne souterraine, ou la montagne se seroit enfoncée."—*Voyage de Kachemire*. The remark made by Bernier continues applicable to the neighbouring and analogous districts: during the labours of Capt. Hodgson in Gerwhal, in 1817, he noticed forty shocks.

been overlooked by the original authority. We also have nothing in the Sanscrit text here, respecting the colony of Brahmins, whom ABULFAZL says, he introduced into the province, and from which it might be inferred that he then introduced the Brahmanical religion, an event that probably occurred, as we shall see, at a subsequent period; the worship in Cashmir, being in the mean time apparently that of the *Nágas* or snake Gods;* a superstition of very obvious occurrence, amongst the rude inhabitants of a country, recently recovered from the waters, and consequently abounding with the venomous reptiles common to slimy and marshy places.†

From the period of the first settlement of *Cashmir* to the reign of GONERDA, the first prince whose name has been recorded, the country was governed by a succession of 52 kings of the *Caurava* family, whose reigns formed a period of 1266 years:‡ these princes were not worthy of record, says our *Hindu* author, on account of their disregard of the precepts of the Vedas, and their impure and vicious lives; and he assigns a better reason for their being forgotten, did they ever indeed exist, in this expression, कर्त्तारः कीर्त्तिकायस्य नाभूवन्कविवेधसः which we may employ *Horace* to translate, Illacrymabiles urgentur ignotique longa nocte, carent quia vate sacro.

The blank thus left in the history by the Hindu writer, is partly filled up by Mohammedan authority, and we may therefore here desert our usual

* See Appendix, No. 2.

† With respect to the Leader of the colony, Dr. Hamilton correctly observes, much confusion prevails, arising probably from different persons being designated by the name CASYAPA. He has endeavoured to distinguish three of the names. 1st. "CASYAPA MUNI son of MARÍCHI; 2nd. KASYAPA married to the daughter of DACSHA, also named TÁRKSHYA, who led a colony of civilized people into Cashmir. And 3d. KASYAPA married to the daughters of VAISWANARA, grandson of the preceding."—*Genealogies of the Hindus.* There is reason to fear however that this distinction can scarcely be made out on original authority. Dr. Hamilton's chronology would rather confirm the assertion of the text that it was the son of Marìchi who colonised *Cashmir*, for he places this sage in the 20th century before the Christian Æra, and it appears not unlikely that Cashmir was colonised about that period.

‡ So also the Ayin Acberi: the author of the Wakiat Cashmir cites Hindu authority, for a Series of 55 Princes and a period of 1919 years.

guide, to contemplate the series of monarchs, derived from another source. According to BEDIA AD-DIN, after the settlement of the country by *Suliman*, he left the sovereignty to his cousin, ISAUN, who reigned over *Cashmir* twenty-five years, and was succeeded by his son

2. CASSALGHAM, who fixed his capital at *Islamabad* and reigned nineteen years.

3. MAHERKAZ his son succeeded and reigned thirty years; being childless, he adopted for his son and successor

4. BÁNDU or PÁNDU-KHAN. The birth of this prince was miraculously effected, his mother becoming pregnant from bathing in a reservoir or tank: his death was equally marvellous, as upon bathing himself in the same reservoir, he dissolved, and returned to the element whence he sprang: he is said to have had a most numerous offspring, and to have seen in his life time, no fewer than fifteen thousand descendants: these were the *Pandavas*, afterwards so celebrated in Indian History.

We may here pause to notice the concurrence of this account, with that which we have already extracted from Hindu authority, of the subjection of Cashmir to a long series of *Caurava* princes, as these are in the estimation of the Hindus, the offspring of a common ancestor, and virtually the same with the *Pándava* race. This position of the family in the north west of India, is referred to in many works, and the chief scene of their early exploits is the Punjab, and its vicinity; and these traditions therefore although much embarrassed by uncertainty and fiction, seem to support the idea that this part of India was the native seat of the Pándavas. Besides the positive assertions to this effect in the history of Cashmir, I find, that in an unfinished manuscript essay by COLONEL WILFORD, and liberally put into my hands by that eminent scholar, he has also particularised *Cashmir* as the birth place of the *Pándavas* upon Hindu authority, and we find in classical authors* the realm or city of *Panda*, or of the Pandavas, in a similar direction, although not precisely the same position: at the same time, it is true, that

* Appendix, No. 3.

CURU the progenitor of the *Caurava* and *Pandava* races is placed by the *Pauranic* writers in a more central part of India, and made king of *Hastinápur* : the five suppositious sons of *Pándu* were however according to the same authorities actually born in the Himàlaya mountains,* whither PÁNDU with his wife CUNTI had accompanied the *Rishis*, and where the Gods descended to rear posterity for the prince: there can be little doubt therefore, that either the original *Caurava* family, or a very important branch of it, came from the northwest and mountainous parts of India.†

To return however to the series of princes enumerated by BEDIA AD-DIN; we have

5. LÁDI-KHAN, son of PANDU-KHAN.

6. LEDDER-KHAN, his son.

7. SUNDER-KHAN in whose reign the idolatry of the Hindu worship again made its appearance: the prince was slain in endeavouring to obstruct its progress, and was succeeded by

8. CUNDER-KHAN his son, who reigned thirty-five years.

* एवं पाण्डोः सुताः पञ्च देवदत्ता महाबलाः। सम्भूताः कीर्त्तिमन्तश्च कुरुवंशविवर्द्धनाः।
शुभलक्षणसम्पन्नाः सोमवत्प्रियदर्शनाः। सिंहदर्पा महेश्वासाः सिंहविक्रान्तगामिनः।
सिंहग्रीवा मनुष्येन्द्रा वृषभर्देवविक्रमाः। विवर्द्धमानास्ते तत्र पुरा हिमवतो गिरौ।

Mahábhárat Ádi Parva (2. 64.) "Thus the five God-given sons of PANDU grew up in the holy mountain of *Himávat*, endowed with divine force, with the strength, the gait and prowess of lions, expert archers, lovely as the moon, and graced with every auspicious mark, renowned through the world, and honouring the race of CURU." In the first or *Anucramanic* portion of the *Mahábhárat* a curious passage occurs relative to the spurious descent of the *Pándávas*, for when the boys are brought to *Hastinápur* by the Rishis, their preceptors, some of the citizens say, they cannot be the sons of *Pándu*, for he has long been dead; यदा चिरमृतःपाण्डु कथंतस्य ते चापरे। the passage is not the less remarkable from its being singular, that is to say, it is not adverted to in the subsequent part of the poem which details the event at length. The *Anucramanicá* is a summary of the whole work, and not impossibly the original, the bulk of the poem being merely a repetition and expansion of the brief narration, which it contains.

† As one additional argument, the complexion of PÁNDU may be mentioned; it is said in the MAHÁBHÁRAT that he was named *Pándu, pale,* from the paleness of his colour. VYÁSA says to the younger widow of his late brother यस्मात्पाण्डुत्वमापन्ना विरूपं प्रेक्ष्य मामिह। तस्मा देष सुतस्ते वै पाण्डुरेव भविष्यति। नाम चास्यैतदेवे ह भविष्यति शुभानने॥ *Mahá. Ád. P.*

9. SUNDER-KHAN, *the second.* Idolatry was now the national religion, and the king erected a temple to *Sadasiva.*

10. TUNDU-KHAN.

11. BEDDU-KHAN, who reigned 115 years.

12. MAHAND-KHAN.

13. DURBINASH-KHAN.

14. DEOSIR-KHAN.

15. TEHAB-KHAN. This prince was attacked and slain by his neighbour and relation, the king of *Cabul,* who seized upon the throne of *Cashmir,* and reigned under the name of

16. CÁLJU-KHAN; after a reign of seven years he was driven out by his *Páńdava* relatives, who raised to the throne

17. SURKHÁB-KHAN; his reign lasted 191 years.

18. SHERMABARAM-KHAN.

19. NAURENG-KHAN; this prince was a great conqueror and extended his dominions to the kingdom of China.

20. BARIGH-KHAN.

21. GAWASHEH-KHAN.

22. PANDU-KHAN the *second;* he recovered the provinces that had been subject to the crown of *Cashmir,* and which extended to the shores of the Indian sea.

23. HARIS-KHAN; his reign lasted 23 years.

24. SANZIL-KHAN.

25. AKBER-KHAN.

26. JABER-KHAN.

27. NAUDER-KHAN, he introduced the worship of fire.

28. ŚANKER-KHAN, who was attacked and slain by BAKRA-RAJ, a neighbouring chief who headed the Cashmirian nobles driven into rebellion by the tyranny of their king.

The six sons of ŚANKER-KHAN succeeded in due order to their father's sovereignty, and also to his fate. Their accession and deaths were the work of a few hours, whence originated the proverb, said to be still current in *Cashmir;*

یک و یک طعام بر دیگوان تا هنگام پختن هفت بادشاهی دید

"One Caldron, on one fire, saw seven kings before the flesh was boiled;" a proverb, which though not of literal, has been in a general sense, of not inappropriate application, to events of eastern history, of a more authentic character, than the one to which its origin is here ascribed.

29. Bacra-raj then took possession of *Cashmir*, and bequeathed it to his descendants: their names are however unknown, and a blank interval precedes the succession of Augnand the first monarch, with whom all the authorities are agreed to commence, what may be regarded, as the dawn of legitimate historical record.

The list above inserted, although of an obviously fabulous construction, still contains matter to excite curiosity, and awaken some speculation as to the possibility of any part of it being true; it seems very probable that it originates with tradition, and is not altogether unfounded, although no doubt much disfigured, and most probably misplaced: the title of Khan attached to the names, few of which too appear to be *Hindu*, indicates a race of Tartar princes, and we shall have occasion to notice the presence of Tartar rulers in *Cashmir*, accompanied with something like chasms in the history, which Bedia ad-din's catalogue would enable us to fill, conveniently enough: if we might conjecture from the names of several princes on the west of India, the invasion of Alexander was the period of Tartar rule in this direction, as Oxycanus and Musicanus might easily be resolved into Tartar appellations with the designation *Khan* attached:* it may be resting too much on conjecture only, however, to give a period of existence to what

* I am not disposed to attach any importance to etymological conjectures in general, and merely adduce such analogies, as possible identifications in the absence of better guides; at the same time I am very much disposed to think with the learned Dr. Vincent, that "most, if not all of the Indian names, which occur in classical authors, are capable of being traced to native appellations, existing at this day among the Hindoos, at least, if not the Moguls." (*Voyage of Nearchus*, 129.) *Lieut. Pottinger* finds a similarity between *Musicanus* and *Moo-Sekwan*, the names of two contiguous districts in *Sind*, and usually connected in utterance. They lie exactly, where we are told, the Greeks found that chief's territories. *Travels in Beloochistan.*

are perhaps after all but phantoms, and we must remain satisfied with the possibility, that they were real personages, who ruled *Cashmir* as foreigners, and that as foreigners, they were extruded from the Hindu annals, and were preserved only by undefined traditions, which have been embodied into the Mohammedan history of SHEIK NURADDIN with little regard to chronology, or truth.

As the first named sovereign of the Hindu history of *Cashmir*, succeeded to the princes who had governed the country for nearly thirteen centuries, there should have been little or no chronological difficulty about the period of his accession: the introduction of *Manwantaras* and *Calpas*, has however obscured a system, otherwise clear at least, if not unexceptionable, and has left it doubtful, whether these princes, as well as the first settlement of the country, come within the limits of the *Cali*-age, and consequently at what date in that age, *Gonerda*, the *Augnand*,* of the Mohammedan writers, was king of *Cashmir*: there are other chronological points, connected with his history, that have received the notice of the Hindu historian.

The passage of the original is however here not very distinct, and refers evidently to computations of an uncommon character. GONERDA as appears from the transactions of his reign, was contemporary with CRĪSHṄA and YUDHISHṬ'HIR, who according to the generally received notions, lived at the end of the *Dwápar* age: this however the author observes is irreconcileable with the series of *Gonerda's* successors, which agrees better with the opinion, that places the existence of the CAURAVA and PÁṄḌAVA princes about the middle of the seventh century of the *Cali Yug*; a computation it may be remarked which is at variance with GONERDA's succeeding to the throne, after that had been occupied for 1266 years, unless some of those years be carried into the preceding age: it is of very little use however to attempt to reconcile these discrepancies, as the different statements are all probably equally incorrect;

* In Nagari गोनर्द or in some copies गोनन्द *Gonerda* or *Gonanda*; the Persian is اوگند Augnand and the author of the *Wakiati Cashmir* as well as BEDIA-AD-DIN leave no doubt of the intention of the Musselman writers as they detail the letters of this and other names, in the manner, common in Arabic and Persian Lexicons.

and it is only of importance to observe, the disagreement between this author and the popular belief, as to the age of YUDHISHT'HIR and CRĬSHŃA, and the reduction of the antiquity usually assigned to them, which is thus derivable from Hindu authority : any other conclusions, we shall be better prepared to make when we have gone through the different dynasties of princes, and the events recorded to have happened during their reigns.* If we may trust the Hindu historian, GONERDA the first was a relation of JARASANDHA, king of *Magadhá*, to whose assistance he led an army from *Cashmir:* the confederates were opposed to CRĬSHŃA, in the province of *Mat'hurá*, and were defeated in an engagement upon the banks of the YAMUNÁ by that chief, and his brother BALARÁMA, by whose hands GONERDA was slain, whilst attempting to rally his flying troops :† the prince was succeeded by his son DÁMODARA who in his impatience to revenge his father's death, attacked a party of the friends of CRĬSHŃA on their return from a marriage in *Gandhár* on the Indus ;‡ the bride was killed in the affray ; but the rage of the bridegroom and his friends was irresistible, and the followers of the prince were defeated, and himself slain ; the whole transaction being such as was probably of not unfrequent occurrence, in the history of these mountainous regions, in a state of society much more advanced, than that of which it is narrated. DÁMODARA left his wife YASOVATÍ pregnant, and ill able to resist the victorious *Yádava.* CRĬSHŃA however sent Brahmans to appease her anxiety, and establish her in the kingdom, silencing the remonstrances of his friends by this quotation from the *Puráná*s काश्मीराःपार्वती तत्र राजा ज्ञेयो हरांशजः नावज्ञेयः स दुष्टोऽपि विदुषा भूतिमिच्छता "*Cashmir* is as PÁRVATÍ,§ and the king is a portion of HARA : if even vicious therefore, he is not to be disrespected by the sage who hopes for heaven."

In due time YASOVATÍ was delivered of a son, who was immediately anointed king,‖ the minister of his father conducting the affairs of the state

* Appendix No. 4. † Appendix No. 5. ‡ Appendix No. 6.

§ This appears to be a pun, *Párvatí* meaning both mountainous and the wife of SIVA.

‖ There is no other word that can be used to express the *Abhishec*, considered an essential part of the ceremony of coronation ; the word means in fact sprinkling, and implies in these cases, the sprinkling of the king with water from some sacred stream, as the Ganges, &c.

during his minority: he was named GONERDA* after his grand-father: his tender years prevented him from taking any part in the war that continued during his youth, to rage between the *Caurava* and *Pandava* families.

A dark period follows the reign of this prince, and the chasm is filled by a nameless troop of thirty-five kings, who deviating from the precepts of the *Vedas* were consequently immersed in the waters of oblivion:† to them succeeded a monarch of some celebrity, LAVA, the Loo or *Looloo* of the Mohammedan historians, of whom the only action recorded is the foundation of the city *Lolora*‡, a city which, according to the extravagant accounts of all parties, contained originally an incredible number of stone edifices,§ and which in modern times, continued to be a celebrated and populous *Tappa* or village. LAVA is also said to have been a benefactor of the Brahmanical tribe.

CUSÉSAYA,‖ the son of Lava, succeeded his father, whom he resembled in conferring endowments of land upon the Brahmanical priesthood.** He was followed in habits and sovereignty by his son KHAGÉNDRA,†† of whom it is recorded that he constructed the towns *Khagi* and *Ehanmusha*.‡‡ SURÉNDRA,§§ the son of this prince succeeded him, and was actively employed in founding

* *Abulfazl* has *Bala*; the designation of the infant monarch, or *Bála*, *a child*, having been mistaken for his own appellation.

† According to *Bedia-ad-din* they were all of the *Pandava* race.

‡ Perhaps the *Durroo* or *Lurroo* of *Forster*, ii. 5.

§ *Abulfazl* has 80 Crore; the original, one *Crore* minus 16 *Lacs* or 84,00,000: both Refiuddeen and Mahommed *Azim* say, that *Looloo* or *Lolot* was a populous place in the Pergannah of *Camraj*, or the western division of *Cashmir*. *Ayeen Acberi*, ii. 162.

‖ *Kishn. Abulfazl, &c.*

** The term used on these occasions is *Agrahára*, which imports a portion of land, or a village, given to the *Brahmans*, with or without a temple or dwelling.

†† *Khagunder. Abulfazl.*

‡‡ *Cacapur* and *Gowmoha* in the time of the Mohammedan writers.

§§ *Serendair. Abulfazl.*

towns and building temples and palaces : one city of his construction was *Suraca* situated near the *Dárada* country, or at the foot of the mountains.

According to the Mohammedan writers, this prince had a daughter named *Catapan Bhanu* of great beauty and accomplishments; the reputation of which induced *Bahman,* the son of *Isfendiar,* who afterwards governed Persia under the name of *Ardisheer Dirazdest,* to solicit and obtain the princess in marriage. It does not appear from what source they have derived this story, as it is not found in the Hindu records, nor in the historical romance of *Firdausi,* unless we suppose it to have originated in the adventures of *Gushtasp,* the grandfather of *Bahman,* who whilst in exile in the west married *Kattyoon,* the daughter of the Emperor of *Room.* (*Malcolm's Persia* 56.) Had there been any foundation for the tradition, it might have been of some chronological utility, but it is probably either an idle invention, or it is a misrepresentation of the fables which relate to the adventures of *Behram Gor,* who according to *Firdausi,* visited *India,* and there married *Sipanud* the daughter of SHANCAL king of Canouj.*

As SURENDRA however had no son, he was succeeded by a prince of ano-

* Or rather of the whole tract of country from *Canouj* to *Khorasan,* according to the Persian poet. Thus *Bahram,* he says, sends an embassy to Shancal, who is sovereign of India from the river of *Canouj* to the borders of *Sind* بنزدیک شنکل نکهدار هند زدریای قنوج تا مرز سند the king in his reply tells him, that the region he rules is full of mountains and streams, and extends from *Canouj* to *Iran* in one direction, and in the other from Siclab (Sclavonia or Tartary) to China.

بهر بوم راکوه ودریاست راه نیابد برین خاک بردیوگاه
وزان روی سقلاب تامرز چین زقنوج تا مرز ایران زمین

The SHANCAL here mentioned is probably the *Shincal* of *Meerkhond* and *Ferishta;* they have however added to his history, and have made him contemporary with AFRASIAB. The union noticed in the text terminated according to *Bedia-ad-din* unhappily, and *Behman* was murdered by the attendants of the princess at her instigation, in resentment of his contemptuous mention of her father; and he did not perish, he observes, as said by other reports, of the bite of a snake.

ther family named GODHARA;* whose successors SUVERNA, JANACA and SACHÍNARA† followed him in regular descent, and continued to build cities, and construct and endow temples for the advantage of the *Brahmans*, and chiefly it would seem for the worship of SIVA. JANACA the second of these princes is said by *Bedia-ad-din* to have sent one of his sons into Persia, with a hostile force during the reign of *Homai*: the invader however was repelled and slain by the Persians under *Darab*, the son of Bahman.

The last of these princes being childless, the crown of *Cashmir* reverted to the family of its former rulers, and devolved on ASOCA who was descended from the paternal great uncle of KHAGÉNDRA. This prince, it is said in the *Ayin Acberi*, abolished the Brahmanical rites, and substituted those of *Jina*: from the original however it appears, that he by no means attempted the former of these heinous acts, and that on the contrary, he was a pious worshipper of SIVA, an ancient temple of whom in the character of *Vijayésa*‡ he repaired. With respect to the second charge, there is better foundation for it, although it appears that this prince did not introduce, but invented or originated the *Jina Sasana*.§ He is said to have founded a city called *Srinagar*, a different place however from the present capital, which is attributed to a much later monarch.‖ In the reign of ASOCA, *Cashmir* was overrun by the *Mlech'has*, for

* Gowdher, Ayin Acberi. † SUREN, JENEK and SEIJUNER. *Ibid.*

‡ There are a *Vijayésa* and *Vijaya cshetra* at Benares. The *Vijaya* Linga adjourned, or in other words, his worship was brought, according to the *Casi C'hand from Cashmir*. Sec. 69.

काश्मीरादिह सम्प्राप्तं लिङ्गं विजयसंज्ञितं । सदा विजयदं पुंसां प्राच्यांशालाकटं कटात् ॥

§ *Bedia-ad-din* says, the new faith was brought from *Ajem*, in which case it must have been the worship of fire that was introduced, a circumstance of no unlikely occurrence, but which at this period of our history is utterly irreconcilable with the chronology of the original, as if it took place after *Daràb* the son of Homai—it very little preceded Alexander's invasion of India—but we have not yet come to the second *Gonerda*, who lived, agreeably to the assertion of CALHANA PANDIT, 1182 B. C.—It must not be forgotten that these Persian transactions are taken from the Mohammedan writers, and are not hinted at in the *Rájá Taringiní*.

‖ RAFI-AD-DEEN calls it *Babara*; the *Wakiat-i-Cashmir* and *Narayan Cul* call it *Sir*, and the latter states that it was in *Miraj*, or the eastern division of *Cashmir*, and that traces of its site were visible in his time.

whose expulsion the king obtained from Śiva a pious and valiant son, as a reward for the austerities he had practised. *

Jaloca, the son and successor of Asoca, was a prince of great prowess: he overcame the assertors of the *Bauddha* heresies, and quickly expelled the *Mlech'has* from the country, thence named *Ujjhita dimba:* he then carried his victorious arms to foreign regions, and amongst others to the North of Persia, which he subjugated in the reign of *Darab,*† and then proceeding in an opposite direction he subdued the country of Canouj.

The conquest of *Canyacubja* by this prince, is connected with an event not improbable in itself, and which possibly marks the introduction of the *Brahmanical* creed, in its more perfect form, into this kingdom. Jaloca is said to have adopted thence the distinction of casts, and the practices which

* The faith of Asoca is a matter of very little moment, as the prince himself is possibly an ideal personage: as however the comparative antiquity of the *Bauddha* and *Brahmanical* creeds in *Cashmir* has been supposed to be affected by it, and the events subsequently recorded, it may be adviseable to give the passages of the original, which shew that Asoca was a worshipper of Siva: it is not improbable however, if we are to attach credit to any part of this portion of the Cashmirian history, that he permitted heretical, possibly *Bauddha* doctrines, to be introduced into the kingdom during his reign from his Tartar neighbours.

अथावहदशोकाख्यस्सत्यसन्धो वसुन्धरां। यः शान्तदृजिनो राजा प्रपन्नो जिनशासनं।

"Then the prince Asoca, the lover of truth, obtained the earth; who sinning in subdued affections, produced the *Jina Sasana.*" This may mean possibly something very different from the received idea, and may imply his neglect of affairs of state through excess of devotion, and his consequently omitting to prevent the intrusion of a foreign power, rather than a foreign faith, into the kingdom, the expulsion of which was the object of his son's birth.

म्लेच्छैः संछादिते देशे स तदुच्छित्तये नृपः तपःसंतोषिताल्लेभे भूतेशात् सुकृतोसुतं॥

"The country being overspread with *Mlech'has*, the king for their expulsion obtained from *Bhutésa* (*Siva* as the Lord of the elements) pleased with his *Tapas*, an excellent son."—Dr. Buchanan has made a strange misquotation from Abulfazl; (A. R. vi.165.) He calls Asoca Raja *Jennet*, and says he *established* in his reign the Brahmany rites, instead of *abolished* them as it occurs in the *Ayin Acberi;* an error which justly drew down the angry censures of the Oriental Critics in the Edinburgh Review for October, 1802, and the Asiatic Annual Register of the same year; the *Mlech'has* might have been Scythians or Tartars. See the observations on the Tartar princes.

† *Bedia-ad-din.*

were at that time established in the neighbouring districts: he also introduced into the Government the forms and offices elsewhere prevalent, and first assigned titles and duties to the following seven officers of state, the *Dhermádhyacsha,* the justiciary, or chancellor; *Dhana-adhyacsha,* treasurer; *Cosha-adhyacsha,* master of the military stores; *Chamupati,* commander in chief; *Dúta,* messenger or embassador; *Purodhá,* the royal chaplain or almoner, and the *Daivajnya* or chief astrologer. The eighteen offices, and their duties, were also defined by this prince, who appears to have been the first of the *Cashmir* kings who introduced religion and government into that kingdom. He is said to have particularly worshipped Siva as Nandésa in consequence of having had read to him the *Nandipurána* by one of Vyása's scholars: he also erected temples to the same deity as Jyéshta Rudra. This prince was possessed of supernatural powers, and several marvellous stories are narrated of him, which we need not pause to extract: he was also a prince of a generous disposition, and a rigid observer of his word: although devoted to Siva, he forbore in the latter part of his reign from molesting the followers of the Bauddha schism, and even bestowed on them some endowments as the *Vihar** called *Crityásrama,* in honor of one of their female divinities, or spirits named *Crityádévi,* by whom he had been addressed as a *Bodhisatwa* himself.† After a long and glorious reign, he went on a pilgri-

* *Vihár* is a common Sanscrit word usually employed to designate a *Bauddha* temple as well as an establishment or College of *Bauddha* priests. It seems to have been also used by the old Persians in a similar sense, and to have been applied to their fire temples. See *Ouseley's Persia* 126, *and note.* In the work before us, it has frequently an extended meaning, and also signifies a Royal pleasure house or garden.

† The divinity who appeared to the prince to intercede for the *Bauddhists* explains the term *Bodhisatwa;*

बोधिसत्वैकशरणाः कांक्षंत्यस्तमसः क्षयं लोके भगवतोलोकनाथादारभ्य केचन। ये जन्तव गतक्लेशान् बोधिसत्वान्वेदि तान्। सागसेऽपि न कुप्यंति क्षमया चोपकुर्व्वते। बोधिं स्वयैवयेष्यन्ति ते विश्वशरणोद्यताः॥

'Those who are *Bodhisatwas* trusting to the one great refuge, are desirous of the destruction of darkness; they proceed in the universe of the Lord, from the Lord of the universe, and are not wroth

mage to *Chiramochana Tirtha*, where after worshipping JYÉSHTA RUDRA, the prince and his queen were both identified with that deity.

The successor of this celebrated monarch was DAMODARA, of whose descent various opinions were entertained; some deducing him from ASOCA and others considering him as sprung from a different family: he was a devout worshipper of SIVA: this prince constructed several stone bridges and causeways, the remains of which were visible in modern times; and there were also two remarkable places, which in the time of *Mohammed Azim* were connected with the legendary history of this prince; the one a set of small irregular springs, and the other a spot of uneven and marshy ground near the city.

On one occasion as DAMODARA was proceeding to perform his customary ablutions in the *Vitastá*, he was importuned for food by some hungry Brahmans; he deferred complying with their solicitations till he had bathed in the river, then at some distance: to shorten the interval they proposed to bring the river to him, and immediately the water of the *Vitastá* bubbled up from different places near them, forming the springs that are still to be seen; the king was unmoved by this miracle, and being still determined to bathe in the genuine stream, the Brahmans denounced a curse upon him, and transformed him into a snake, in which shape he haunts the ground near

wroth sinfully at the distresses inflicted on animal nature unpervaded by waking truth, but alleviate them by patience. Those who seek to understand themselves, they are strenuous in bearing all." A BODHISATWA is therefore nothing but a man of patience and piety, and may be regarded as a living type, and figuratively as a lineal descendant of BUDDHA: his origin from the Lord of the universe (*Locanat'h*, an epithet of BUDDHA) in this passage, may be so intended: at the same time it appears that BODHISATWA is sometimes considered literally as the son of BUDDHA; On verra dans la suite de cet ouvrage que Phou sa ou Boudhisatoua, les fils de Bouddha, &c. *Mons. Remusat*, on the polyglot Chinese vocabulary. Mines de l'orient vol. iv. 198, note. The continuation he refers to has not yet been received. The term, as a generic appellation of a living *Buddha*, is common in all Bauddha countries: one of the *Bourkhans* of the Calmucks is named Khomschin *Bodi-Sada* (Pallas. Fr. Trans. Oct. ii. 222.) An Indian teacher of Bouddhism, who was invited into Tibet, is named Pothi satho (Giorgi. 240), and according to *Loubere* one of the names of Sommono Codom (Samana Gotama) amongst the Siamese, is Pouti Sat, or *Seigneur Pouti. (Vie de Thevetat.)*

the Capital, and is often to be seen: this spot is called *Damodar-uder* according to the Musselman accounts.*

DAMODARA was succeeded by three princes who divided the country, and severally founded capital cities named after themselves. These princes were called HUSHCA, JUSHCA, and CANISHCA,† and these appellations are strongly corroborative of an assertion of our author, that they were of *Turushca*, that is, of *Turc* or *Tartar* extraction: they are considered as synchronous, but may possibly be all that are preserved of some series of Tartar princes, who, it is very likely, at various periods, established themselves in *Cashmir*. The chief event recorded of their reign is the foundation of the three several capitals, named after themselves,‡ but another and more important consequence of their Sovereignty is said to have been the almost entire change of the national faith, and the nearly exclusive prevalence of the doctrines of the *Bauddhas* under a *Bodhisatwa* or hierarch named NÁGÁRJUNA. The period at which this took place is said to have been 150 years before the death of *Sacaysinha*.§ The presence of the *Turushca* princes in *Cashmir*, we may observe, is in harmony with Tartar traditions; according to these, *Oghuz* their patriarch is represented to have subdued that country, and introduced the religion of *Japhet* there, so long back as 2800 years before the Christian æra.‖ A second Scythian irruption and subjugation of India, bordering on

* I understand from some natives of *Cashmir* that this superstition still exists, and that DAMODARA, transformed to a serpent, still haunts a lake about seven *cos* from the Capital, and is still occasionally visible: no doubt, in *that form*.

† BEYSHEK, RESHEK, KINSHEK. *Abulfazl.* Brothers according to the same authority, but not so termed in the original.

‡ Hushcapur, said by the modern writers to be the modern *Sheeroh* in the *Pergannah* of *Lar*, and a town of some extent: *Jushcapur* and *Canishcapur* are identified with *Dahimpur* and *Cansapur*, two inconsiderable villages in the time of *Mohammed Shah*.

§ Appendix, No. VII.

‖ OGHUZ conquit ainsi toute la *Bukharie*, *Balkh*, *Khor*, *Kaboul*, *Ghazna* et le *Kaschmir* ou il y avoit un prince fort puissant nommé *Jagma*. *Des Guignes Tome prem. Partie seconde p.* 10. We cannot find in the text any name resembling the *Jagma* of the Tartar tradition, but it is apparently a Hindu appellative, and the omission of its original is easily accounted for; we have an evident chasm in the history here, and the accession or expulsion of the *Turushca* princes is equally unexplained.

the *Sind* is also said to have occurred about the middle of the 7th century before Christ:* neither of these dates will correspond precisely with that of the reigns above described, but they are all perhaps equally of little value, and only corroborate the general fact, that at some remote period the Tartars or Scythians did govern *Cashmir*, and render it probable, that *they* first gave the sanction of authority to their national religion, or that of BUDDHA, in India.

The Tartar princes were succeeded by ABHIMANYU, a monarch evidently of a Hindu appellation, and a follower of the orthodox faith, which he re-established in *Cashmir*. The chief instrument in this reform was CHANDRA, a Brahmin celebrated as the author of a grammar, and a teacher of the *Mahabháshya*.† In consequence of the disuse of the prescribed institutes, the abolition of every form of sacrifice, and a departure from the lessons of the *Nila Purána*,‡ the *Nágas* were particularly incensed, and visited the offences of the people with severe and unseasonable storms of rain and snow, in which those especially perished who had adopted the *Bauddha* heresy:§ in this situation of the kingdom, CHANDRA, descended it is said from CAŚYAPA, addressed his prayers to MAHÉŚWARA as NÍLA NÁGA, the tutelary deity of the country, and obtained from him a termination of what our author calls, the double plague of *Cashmir*, the severity of the seasons, and the predominance of the *Bauddhas*.

The reign of ABHIMANYU closes the first series of princes, and introduces us to a period in which the author of the *Rájá Taringiní* affects greater pre-

* *Maurice's Ancient History of India*, ii. 224; according to Blair, B. C. 624 in the reign of Cyaxares or Kaikaoos. A subsequent irruption took place in the reign of *Darius Hystaspes*, if he be, as he probably is, the same with *Gushtasp*: this last was of a decidedly religious character. Malcolm's Persia, i. 62.

† The name of CHANDRA occurs amongst the eight ancient Grammarians of the *Hindus*. *Colebrooke on the Sanscrit and Pracrit Languages, A. R.* vii. 204 and 5.

‡ The *Purána* of the *Nága* or Serpent god, named *Nila*.

§ Appendix, No. VIII.

cision than before, and specifies the term of each prince's reign: it is evident however that the reigns of the earliest sovereigns are much too protracted, and they must be considerably reduced to be brought within the limits of probability: the object of the author is evidently to reconcile the details with the gross amount of years, which he has stated to extend, from the first prince of the new series, the third GONERDA, to 1070 of *Saca*, and which he has made 2330: how far this postulate is correct we are not yet prepared to determine; and must refer its discussion to the close of the history, when we shall have the whole subject before us: in the mean time the chronology of our author may be admitted, and the dates of the various reigns assigned to them on the principles of his computation; commencing accordingly with the year before Christ 1182 corresponding with 2330 years before *Saca* 1070 or A. D. 1148.

GONERDA* the third, succeeded ABHIMANYU, and prosecuted the reform which that prince had commenced; the ancient ritual agreeably to the *Nila* precepts, was restored, and the worship of the *Nágas* and the offering of sacrifices re-established: by acts of this description, the fame of monarchs is perpetuated, and this prince gave the same lustre to his family, as RÁGHAVA diffused upon the race of RAGHU. He reigned 35 years.

GONERDA was succeeded by several princes of whom we have only recorded the dry list of names, and the duration of their reigns. These were

VIBHÍSHAŃA, who reigned 53 years; INDRAJITA, 35 years and 6 months; RÁVAŃA, 30 years; VIBHÍSHAŃA 2d, 35 years and 6 months;

Making an aggregate of 154 years. Of RÁVAŃA, it is said, that he extended the worship of SIVA as the LINGA *Vatéśwara*, and of the second VIBHÍSHAŃA that he was both a Patron and Cultivator of the art of Music; the Moham-

* According to *Bedia-ad-din* he was not born but elevated to the throne; how, is not mentioned; the same authority makes him subdue, by means of his general *Nand Ram*, the whole of Hindustan as far as the Nermada.

medan writers say, that in their days *Tiránehs* ascribed to this prince were current in *Cashmir*.*

B. C. 993 or 490. NARA† the son of VIBHÍSHAŃA succeeded his father; this prince began his reign virtuously, but one of his wives having been seduced from her fidelity by a Bauddha ascetic, the king committed a thousand *Vihárs* to the flames, and gave the lands attached to them to the *Brahmans;* the only measure, which seems to authorise the account of ABULFAZL, that in this reign the *Brahmans* got the better of the followers of *Buddha,* and burnt down their temples: in fact, however this prince seems to have been as little disposed to regard one sect as the other with complacency, and finally fell a victim, it is said, to the resentment of one of the orthodox priesthood.

The legend which introduces this catastrophe is not without poetical merit, although too purely poetical to be here transcribed at length. A Brahman had become the son-in-law of *Susravas,* the *Nága,* whose palace was in a lake, near the borders of the *Vitastá,* and in a city founded by NARA near that river. The wife of the Brahman, *Chandrabáhá,* residing there with her husband, attracted the illicit affection of the King, and having resisted all his solicitations, obliged him at length to attempt to carry her off by force: the attempt failed: the *Brahman* invoked the aid of his father-in-law, who rising from the lake in wrath, excited a violent storm which destroyed the guilty monarch and his people. The sister of the snake God aided him in his attack upon the city with a shower of large stones brought from the *Ramañya* mountain, the cavities whence they were taken are still, says our author, to be seen. The *Nága,* a little ashamed of his cruelty, deserted the country, taking with him his son-in-law and his daughter; the waters of the lake he formerly inhabited, he changed to the whiteness of milk, as may be seen at the *Amaréśwara yátra;* this lake is sometimes called *Jamátrísar:*

* *Bedia-ad-din* here inserts another prince *Inderáyan,* who was a magician and tyrant, and therefore put to death by his brother *Cailás Sinh.*

† Written *Booz* by the Mohammedan writers.

the story is recalled to the minds of men, when they visit *Upachacra Dhára.** We may observe however that the destruction of the city, and death of this prince, are ascribed by *Bedia-ad-din* to a popular tumult, excited by the conduct which is here stated to have produced the catastrophe.

NARA was succeeded by his son SIDDHA, who had escaped the late calamity by having been sent with his nurse to *Vijayacshétra* some time before. He collected the dispersed and frightened people, and restored prosperity to the kingdom: he reigned sixty years.

We have again a barren series of successive princes, whose names and reigns alone are recorded:—

	Years.	Months.
Utpalácsha, who reigned - - -	30	6
Hiranyácsha, - - - - -	37	7
Hiranyacula, - - - - -	60	0
Vámacula, - - - - - -	60	0

The last of these was succeeded by his son MIHIRA CULA,† a prince of vio- B. C. 705 or 310.

* *Chacder* near *Mabrah*, according to the author of the *Wakiat-i-Cashmir*: *Narayana Cul* says, there are two fountains, one of the snake and the other of his son-in-law, on the borders of *Dutchenpara*, and their united water runs to *Laider*. *Abulfazl* speaks of a rivulet with a bed of white clay in this situation (Ayin Acberi, ii. 133). The origin of this and similar fables is very obvious; they are invented to account for the various phenomena, especially with regard to lakes and springs, with which *Cashmir* so plentifully abounds. *Abulfazl* has a long list of the *Ajaibwa Gharaib* of this district, and is far from having exhausted the subject, if we may depend upon other authorities. We know less of *Cashmir* from European enquiry than of almost any other district in the East: it would no doubt amply reward more minute investigation.

† These names are strangely transformed in the *Ayin Acberi* to
Adutbulabeh.
Hernya.
Herenkul.
Ebeshek, and
Mirkhul.

The first prince appears to be intended by the name of PUSCHCARÁCSHA, which means the same thing, 'the lotus-eyed,' who is mentioned in the *Mudrá Rácshasa*, as the king of Cashmir, who was one of the princes confederated against *Chandragupta* or *Sandrocottus*. The second of the series HIRANYÁCSHA is the hero of a marvellous story in the *Vrihat Cathá*, which leads to his

lent and cruel propensities; the kingdom upon his accession was crowded with *Mlech'has*, although whether as attached to the king, or as enemies, does not appear. The violent disposition of this monarch led him to an attack upon *Lanca*. The cloth of *Sinhalá* was stamped with a golden foot as the seal of its prince; the wife of MIHIRACULA wearing a jacket of *Sinhalá* cloth, the impression of the seal came off upon her bosom, and the king happening to observe it, was filled with unappeasable indignation, at the idea of the foot of a stranger being impressed upon the bosom of his wife. To revenge the fancied insult, he led his army to *Lancá*, deposed the king, and placed another on the throne, stipulating that the *Sinhalá* cloths called *Yamushadeva* should in future bear his own seal, a golden sun. On his way back to *Cashmir*, he subdued the sovereigns of *Chola*, *Carnáta*, *Láta*, and other monarchs of the *Decshin*. Arrived in *Cashmir*, he founded the temple of *Mihiréswara* in the capital, and built the city *Mihirapur* in the district of *Holora*, in which the Gandhár* Brahmans, a low race, and therefore the more highly esteemed by this iniquitous monarch, were permitted to seize upon the endowments of the more respectable orders of the priesthood. According to *Mahommed Azim*, he also constructed in the purgunah of *Ouder* the *Chandracul* canal, which existed in that writer's time.

Two instances of this monarch's ferocious disposition are recorded by the original authority, and have both been transcribed with some alteration by ABULFAZL and the other Mohammedan authors: on the return of MIHIRACULA to his own kingdom, one of his elephants fell, whilst proceeding along a narrow defile, and was crushed to pieces by the fall: the cries of the dying animal were music to the ears of the prince, and so delighted was he with the sound, that he ordered 100 elephants to be precipitated in a similar manner, that his entertainment might be protracted; according to *Abulfazl* the pass was thence called *Hasti Wuttar; Hasti* signifying an elephant and *Wuttar* meaning injury; the latter part of which etymology is scarcely

his marriage with a *Vidhyádhari*, a Hindu goddess of an inferior order. The prince is called in the *Vrihat Cathá*, the son of *Cánac'ha*: in other respects there is no question of the identity.

* The *Mahábhárat* mentions the Brahmans of this country as of an inferior tribe, as is noticed in Appendix, No. VI.

of Sanscrit origin: besides which, that author is a little at variance with himself, as he had previously separated the two words, and told us that they were different portions of the Bember road, through both of which an army might pass. The other anecdote has been supposed to account for the title by which this prince was known of *Tricotihá*, the slayer of three millions: amongst the ruins of *Narapur*, destroyed as we have seen in the reign of NARA by the *Nága* SUSRAVAS, some *Khasa* tribes had taken up their abode: to drive them from the prohibited residence, a large stone fell into the bed of the *Chandracula* river, and completely obstructed the current: the prince was instructed in a dream that its removal could only be effected by a female of unsullied virtue, and he accordingly commanded women of respectable birth and station, to perform the task: their efforts were unavailing: women of the first families and supposed irreproachable conduct, attempted in vain to remove the stone, and its removal was at last effected by a female of a low class, the wife of a potter: the king incensed by this divine proof of the corrupt lives of the female part of his subjects, ordered them to be put to death, together with their husbands, children, and brothers, as implicated in their disgrace.* The blood shed by the commands of this sanguinary sovereign, was expiated by his death: suffering under a painful disease and awakened to some sense of his past cruelty, he determined to put a voluntary term to his existence and end his days upon the funeral pile. He found it impossible, however, to meet with persons qualified to conduct the ceremonies of his cremation, as his kingdom was crowded with the impure tribes of *Dáradas*,† *Bhoteas* and *Mlech'has*. Revoking therefore his grants to the *Gándhára* Brahmans, he invited those of *Aryadé'sa*, on whom he bestowed a thousand *Agraharas* in *Vijayéswara*. The pile was constructed of military weapons, and the king having seated himself on the summit, the fire was applied, and quickly put a period to his sufferings and his crimes. The duration of his reign is said to have been 70 years.

* The point of this story is the same as of that related of PHERON by HERODOTUS, ii. 111. and *Ancient Universal History*, i. 294.

† A. R. vi. 417. *Daward*, the mountainous range north west of *Cashmir*, and the present residence of the *Durds*.

VACA* the son of MIHIRA CULA succeeded his father: he founded the city *Lavanotsa* on the banks of *Vacąvati* river: he was prevailed upon to assist a *Yogíswarí* at a rite, which enabled her to traverse the air at a spot where the impression of her knees is still visible on a rock.† He was accompanied by a hundred of his descendants, and the legend of *Śatacapáléśa* and the *Matrichacra* stone is still commemorated at *Khira Matha* or *Khira* College: VACA reigned 63 years and 13 days. The names and reigns of his immediate successors are all that has been recorded of them:

CSHITINANDA, ruled	30 years.
VASUNANDA, ...	52 years and 2 months.
BARA, ...	60 years.
ACSHA,‡	60 years.

B. C. 370 or 130.

A Cáma Sastra is ascribed to the second of these princes. ACSHA was succeeded by his son GOPÁDITYA,§ a prince of eminent piety, whose virtue brought back the *Satya* or golden age: he enforced a strict observance of the ritual and distinctions of cast, removed those Brahmans who had adopted impure practices from their endowments, and invited others from distant countries to replace them, and finally he forbad the killing of any animal except for the purpose of sacrifice. According to the Mohammedan authorities, he built a temple, or the mound near the capital of *Cashmir*, called the *Takht Suliman*:‖ it was destroyed with other places of Hindu worship by Secander,¶ one of the first Mohammedan kings of *Cashmir*, and who, on account of the bigoted assiduity with which he demolished the vestiges of Hindu superstition, is constantly alluded to by the title *But Skeken*, the idol breaker,

* *Beck.* Ayin Acberi.

† At *Beren* or *Meren* according to NÁRÁYAN CUL, who adds that she killed the king: the subsequent allusion is not further explained by CALHAŃA PUNDIT.

‡ *Kutnund. Vistnund. Nir. Aj. Ayin Acberi.* § Kulvarit.—*Ibid.*

‖ *Bedia-ad-din* notices a tradition that the tomb in this building was said to enshrine the remains of a christian apostle.

¶ This is from *Refiaddin*, but NARAYAN CUL asserts that it was still standing in his time. *Forster* does not notice any ruins or buildings on this spot, but we have mention made of them

by

GOPÁDITYA, after a reign of 60 years, was succeeded by his son GOKERNA,* of whom it is merely stated that he erected a temple to GOKERNÉŚWARA.†

NARENDRÁDITYA,‡ his son, succeeded him, after a reign of 57 years: *he* reigned 31 years and a few months, and left the crown to his son YUDHISHTHÍRA§ surnamed the *blind,* from the smallness of his eyes.

The commencement of this monarch's reign was influenced by the same attention to virtue and propriety, as had governed the conduct of his pious predecessors. As fortune had however decreed that he should be the last of his dynasty, he gradually ceased to regard the lessons of prudence and piety, and addicted himself to sensual pleasures and disgraceful society: he was constantly inebriated with wine: his companions were harlots and buffoons, and he treated with levity and scorn the admonition of his counsellors: the administration of affairs was neglected: the chief nobles defied the royal authority, and foreign princes encroached upon the confines of the kingdom. To prevent the ruin of the state, and to revenge upon the prince the insults they had received or prevent those which they anticipated, the ministers approached the palace with a numerous and well appointed force: as resistance was hopeless, the king precipitately fled from *Srinagar,* and secreted himself in the woods and mountains with his women and a few followers, doomed now to exchange luxury for privation, the downy couch for the sharp rock, and the harmony of minstrels for the wild dashing of cascades, or the wilder horns of the mountaineers: he at last found a refuge in B. C. 216 or 40.

by BERNIER. A 'l opposite de cette montagne il en paorit une aussi avec une petite mosquée avec unjardin et un tres ancien batiment qui marque avoir eté un temple d' Idoles, quoiqón l' appelle *Tact Souleman,* Le trone de Souleman ii. 274.

* Kurren.—*Ay. Ac.*

† The lord of GOKERNA, being in fact a LINGA, as whenever that emblem of SIVA is set up, it receives the appellation of ISWARA compounded with some word expressive of the divine attributes, as VISWÉŚWARA, the Lord of all; of the locality of its site, as *Gangeswara, Cedareswara,* &c. or of the person by whom it is erected, as in the text.

‡ *Nurundrawut.—Ay. Ac.* § *Jewdishter.—Ibid.*

the courts of some compassionate princes, where, according to general belief he died in exile; according to other accounts, he engaged in unsuccessful attempts to recover his kingdom, in one of which he was taken prisoner by the nobles and thrown into captivity, from which he was released only by his death. The term of his reign was 48 years.

B. C. 168 or 10. The successor of YUDHISHTHÍR was PRATÁPÁDITYA,* who was invited from another country: he was a kinsman of the king VICRAMÁDITYA; a different monarch, says our author, from the *Sacári Vicramáditya*, although sometimes identified erroneously with that prince:† he was a virtuous monarch and enjoyed a prosperous reign of 32 years, leaving his crown to his son,

JALAUCAS,‡ who also reigned 32 years, and was succeeded by his son,

TUNJÍNA,§ who with his queen VACPUSHTÁ, erected the temple of TUNGÉŚWARA, and founded the city *Haravasanticá*, in a district watered by the *Satahradá*, and *Payovahá* like the bow of *Indra*, and its string.¶ In their time existed CHANDACA a portion of DWAIPAYANA, whose *Nátya* is well known.

In the reign of this prince an unseasonable fall of snow in the month *Bhádra* destroyed the crops, and caused a famine, in which great numbers of people perished: such was the general distress, that all the ties of society were dissolved, and all the duties of life disregarded: modesty and pride, family honor, and public respect were all forgotten: the love of parent and child, of husband and wife, no longer prevailed: every individual sought alone for self-preservation, and although reduced to bones and tendons, the famished skeletons fought with fury for the carcases of the dead,

* *Pertaubdut.—Ay. Ac.*

† Notwithstanding our author's assertion, it seems probable that the identification is right. *Narayan Cul* and *Bedia-ad-din* state that *Pratápáditya* was related to *Vicramáditya*, the celebrated prince of Malwa: we shall have occasion to advert hereafter to this subject more fully.

‡ *Juggook.—Ay. Ac.*

§ Bunjir.—*Ay. Ac.*

¶ The first is the *Setlej*, the second must be the *Beyah*, to which the name in the text sufficiently approaches.

The king exerted himself to relieve the distresses of his subjects, and exhausted his own treasures, as well as those of his ministers, in procuring supplies of grain: the jewels of his court and queen were appropriated to the same purpose, but the famine still continuing, the monarch, despairing of relieving his afflicted people, and unable to witness their sufferings, determined to put a period to his existence by committing his body to the flames: from this purpose he was dissuaded by his queen, and once more addressing their earnest supplications to the gods, they obtained by their divine interposition, a miraculous shower of pigeons, who fell dead in the streets of the capital every day for a considerable period, and furnished the inhabitants with food until the products of the earth once more supplied them with subsistence. This prince died after a reign of 36 years: his wife accompanied him on the funeral pile at a place thence called *Vacpushtáťavi*, and to which it was customary, in our author's time, for persons to bring the dead bodies of those husbands to be burnt, whose wives had the virtue to emulate the example of this pious princess.

As the pure piety of this couple did not permit their having posterity, a prince of another family ascended the throne: he was named Vijaya,* and built the temple of *Vijayéswara* in the capital. He reigned 8 years, and was succeeded by his son

Jayéndra,† who was distinguished by the length of his arms, his hands touching his knees: this prince was fortunate at first in a minister of great integrity and talent, named Sandhimati, but influenced by the advice of those who envied the minister's superiority, the king conceived an aversion for him, and dismissed him from his employments: the poverty to which he was thus reduced served only to heighten his reputation: he devoted all his thoughts to religion, but a report, of heavenly origin, soon prevailed, that he was yet destined to wear a crown: when the report reached the king, his fears were excited, and seizing the person of Sandhimati he threw him into prison, and kept him several years in close confinement; at the expiration of that term, the king, feeling his end approach, was determined before his death

* *Bejeery.*—Abulfazl. † *Chunder.—Ibid.*

to frustrate the decrees of fate, and to carry with him into a future state the spirit of his obnoxious minister; accordingly, on the same night on which the monarch's body was burnt, the executioners put SANDHIMATI to death upon a stake.* JAYÉNDRA reigned 37 years.

When IŚÁNA, the *Guru* of SANDHIMATI, heard of his death, he repaired to the place of execution, to recover the body, and secure for it funeral rites. On taking the body from the stake, and fastening the feet and head together, in order to remove the corpse more commodiously, he was struck by an inscription on the forehead, which his knowledge enabled him to decypher; it was to this effect, "a life of poverty, ten years' imprisonment, death on a stake, and accession to a throne;" predictions of which three had come to pass, and the fourth was yet to be fulfilled. For the accomplishment of the splendid part of our hero's fate, the *Brahman* performed those rites which compel the attendance of the ministers of *Siva*, the *Yoginís*; who accordingly appeared, and restored animation to the lifeless body of SANDHIMATI, whom they endowed with singular beauty and supernatural powers, and hailed as future king by the title of ÁRYA RÁJA.† The news of this miraculous restoration spread through the kingdom, and all classes of people, impelled by resistless destiny, hastened to salute him as king: they led him in triumph to the capital, and he commenced his pious reign.

Whoever might have been the person, thus made the subject of miraculous tradition, it appears from our author's account, supported by him by reference to local corroboration, that he was an active promoter of the worship of ŚIVA as the *Linga*, with the usual accompaniments of the Trident and the Bull. Many temples of this description, continued at a long subsequent period, to be ascribed to this reign, and particularly one called *Sa-*

* क्रूरैः वधकर्म्माधिकारिभिः सन्धिमतिः शूले समारोप्य विपादितः।

"SANDHIMATI being elevated by the savage executioners on the *Sula* was killed." He was perhaps impaled. Major Wilford however considers the instrument to be a cross.—*See A. R.* x. But the punishment of impaling has always prevailed in the east: accounts of it in Ceylon, Java, the Burman Empire, &c. are numerous and authentic.

† Ariraj.—*Abulfazl.*

hasralingam, from its containing a thousand *Lingas*, constructed of stone, the remains of which were visible in the time of CALHAÑA PAÑDIT.

After reigning 47 years, ÁRYA, the pious monarch, whose court was like the palace of *Mahéswara*, where the articles of fashionable dress were ashes of burnt cowdung, rosaries of the *Eleocarpus*, and matted locks of hair, and the favorites and companions of the prince were mendicants and ascetics, grew weary of the cares of state, and determined to retire into the seclusion, better suited to his apparently fanatical propensities: having found that a descendant of *Yudhisht'hir* still lived, he recommended the youth as his successor, and delivering the government into the hands of the nobles, he divested himself of his royal ornaments, and with no other garment than the *Dhoti*, bare-footed, and without his turban, carrying with him the *Archalinga*,* and observing a strict silence, he came out from the city, followed by an immense concourse of people: at the end of about two miles, he sat down under a tree, and addressed his followers, whom he prevailed upon to disperse: he then resumed his route to the *Tírt'ha* of NANDÍŚA or NANDÍCSHÉTRA, where he ended his days in ascetic mortification, and the assiduous worship of the god whom the three worlds obey.

MÉGHAVÁHANA,† who was invited to succeed to the throne of his ancestors, was the third in descent from YUDHISHT'HIR, being his great grandson: his father had found an asylum at the court of GOPÁDITYA, king of *Gandhár*, whose assistance had restored him to some degree of opulence and consequence: his son MÉGHAVÁHANA was thence enabled to present himself amongst the candidates for the hand of the princess of *Pragjyotish* or *Asam*, and to obtain her election.‡ With his wife, and a suitable dower, he had rejoined his father,

* The *Jungum* profess the exclusive worship of ŚIVA, and an appropriate emblem of that deity, in its most obscene form, inclosed in a diminutive silver or copper shrine or temple, is suspended from the neck of every votary as a sort of personal god.—*Wilks's Mysore*, i. 501. This is probably the *Archalingam* of our original, *archá* meaning worship. The introduction of this sect into the *Decshin* in the eleventh century must have been long subsequent to its establishment in the north of India, by any calculation that may be adopted.

† Megdahen.—*Abulfazl.*

‡ According to *Bedia-ad-din* the lady was the princess of *Khota.*

when the Nobles of Cashmir sent a deputation to solicit and accompany his return to that kingdom, to which he immediately hastened, and of which he assumed the sovereignty.

Méghaváhana, although a worshipper of the orthodox divinities, was inclined to adopt the *Bauddha* doctrine: he encouraged the professors of that heresy to settle in his dominions, and particularly prohibited the destruction of animal life, granting from the public revenue a maintenance to such individuals as followed the business of hunters or butchers, whom his enactments deprived of their accustomed means of support.

Although thus careful of brute existence, he seems to have been less scrupulous about human life; being a warlike and victorious sovereign, and engaging in remote and hostile expeditions he is said to have led his armies to the sea shore, and by the aid of *Varuńa*, who opened a dry path through the waters for his army, to have crossed over to *Lancá* or Ceylon, where he ascended, with his troops, the *Gem-enshrining* peak of the mountain *Rohańa*.* Whilst encamped on the mountain, the king of the island, the *Rácshasa* Vibhíshańa,† came voluntarily, and submitted to his invader, in consequence of which he was confirmed in his sovereignty, on condition of his no longer permitting in his island the expenditure of animal life.‡ Mé-

* *Adam's* peak the *Rahu* (رهو) and *Rahun* (رهون) of the Mohammedans, according to whom also it contained mines of precious gems. *Rohańa* implies the act or instrument of ascending as steps, a ladder, &c. and may refer to the rude steps and links of iron chain work, described by *Valentyn*, and more recently by *Mr. Percival*, and *Sir William Ouseley*, i. 59.

† After the defeat and death of Rávańa, Ráma conferred the sovereignty of *Lancá* upon Rávańa's younger brother Vibhíshańa, who is generally supposed to be still the monarch of *Lancá*.

‡ In other words, he introduced or enforced the *Bauddha* faith. Whatever credit it may be thought, that these *Cashmirian* tales of a conquest of Ceylon by one of their kings deserve, they are curiously connected with the *Sinhalese* traditions of foreign invasion, and consequent introduction of the *Bauddha* faith. Vijaya Raja, the first monarch of that island, and who introduced the present religion, invaded it, it is said either 534 years before Christ, or A. D. 77 or 106 or 350. A. R. vii. 51 and 421. *Moleny* and *Joinville's* accounts of *Ceylon*. Discordancies that admit perhaps of some explanation, the first referring to the period at which *Gautáma* the founder of the Bauddha faith existed, and the others to the date of its introduction in the Island, an event to which foreign conquest was chiefly conducive.

GHAVÂHANA then returned to *Cashmir*, where the memory of his transmarine expedition, says our Sanscrit guide, is still preserved on the banners, which on particular occasions, are carried before the kings of Cashmir.

The son of the last prince, SRÊSHTASÊNA,* also called PRAVARASÊNA, succeeded his father: the Hindu record only commemorates his founding a temple of PRAVARÊSA; but *Bedia-ad-din* makes considerable additions to his history: according to him, this prince established his mother on the vacant throne of *Khota*, and extended his own authority to *Khatai*, *Chin* and *Machin*. He reigned 30 years, and left his kingdom to his two sons HIRAÑYA† and TORAMÂÑA; the former holding the superior station of the *Sámrájya*, and the latter that of the *Yauvarájya*, or being respectively Emperor and Cæsar, a division of power of considerable antiquity amongst the Hindus, and one which, with them, as well as with the Latin, Greek, or German princes, was often a source of public contention: it proved to be so in the instance before us: the latter having proceeded to strike coins‡ in his own name, the elder brother took offence at the measure, and deposed the *Yuvarája*, and kept him in close confinement. The wife of TORAMÂÑA, who was pregnant at the time, effected her escape, and found shelter and privacy in a potter's cottage, where she was delivered of a son: the boy was brought up by the potter as his own, but his high birth betrayed itself, and he was a prince in all his sports and amongst his play-fellows; his juvenile imperiousness having caught the attention of JAYÊNDRA, his maternal uncle, then searching for his sister, led to

* Sereshsain.—*Abulfazl.* † Heren.—*Ibid.*

‡ *Dinars*: the word is Sanscrit, and although generally signifying a certain weight of gold, also means as above, a gold coin perhaps of the weight of 32 rettis or about 40 grains. The *Dinar* must have been common in Persia and Syria at the time of the Arabic invasion, as the Arabs to whom an original coinage, was then unknown, adopted both it and the *Dirhem* or *Drachma*. According to the *Ayin Acberi*, the *Dinar* weighs one *miscal*, and is equal to 1 and 3-7th of a *Dirhem*, which weighs from 10 to 5 *miscals*, or, at 7½, the average giving a proportion of gold and silver, as 1 to 10. According to *Ferishta* the *Dinar* was worth 2 Rupees, which will give us about the same proportion. There is an evident etymological affinity between the *Dinar* of the Hindus and the *Denarius* of the Romans: the latter, though originally a silver coin, was also of gold, and the author of the *Periplus* named Adrian's, states, that *Denarii*, both gold and silver, were amongst the articles exported from Europe and carried to *Barygaza* or Baroach; the Sanscrit, *Dinár*, may therefore be derived from the Roman coin.

their discovery, and that nobleman privately took home his sister and her son. In the mean time TORAMÁNA died in captivity; on which event the princess, to divert her grief, went, accompanied by her son upon a pilgrimage to the south: during her absence the king died, after a reign of thirty years and two months. He left no posterity, and the claims of his nephew being unknown, the throne of Cashmir was vacant, and continued so for a short period.

The ruler of *Ujayini* at that time was *Srimán Hersha Vicramáditya*, who after expelling the *Mléchch'has*, and destroying the *Sacas*, had established his power and influence throughout India.* In his train was a Brahman named MÁTRIGUPTA, to whom he was much attached: upon hearing of the vacant situation of the Cashmir throne, and the indecision of the nobles with regard to a successor, he sent the Brahman to them, with a letter from himself, recommending him to their election: they complied with the recommendations of a sovereign, whose commands they felt themselves unable to resist, and crowned MÁTRIGUPTA† as their king.

The reign of the Brahman was of limited duration: the death of his powerful protector exposed him to the disaffection of his chief subjects,

* Who was this prince? As the enemy of the *Sacas*, and also from our author's chronology, he is synchronous with *Sálivâhana*, with whom indeed, notwithstanding a difference in date of 135 years, all the Hindu accounts represent him to have been engaged in hostility. We have had a *Vicramáditya* before him in this history, not the *Sacári* as expressly remarked by the historian, and therefore we cannot doubt our author's meaning, although we may question his chronological correctness, as I shall hereafter endeavour to shew: it is singular that in a very long eulogium on this prince, which I have not thought it necessary to translate, the author never alludes to *Sálivâhana*, nor to any of the literary ornaments usually assigned to *Vicrama's* court. The name HERSHA appears to bear some affinity to *Hersha Mégha* (A. R. ix. 175) father of the *Vicrama* of the fifth century, in which indeed he may not very improbably be placed. We must however leave these points for the present, as we are not yet prepared for their due discussion. The Mohammedan writers are of no assistance here, as they repeat the name of *Bicramajit* without any comment on its again occurring.

† *Mater kunt.—Abulfazl.*

and to the arms of the lawful heir PRAVARA SÉNA, who with a small but resolute band of friends, was approaching *Cashmir:* he seems to have surprized the Brahman by an unexpected attack upon his camp, or at least to have encountered him upon a journey when unprepared for a contest, and although no serious engagement ensued, the issue was MÁTRIGUPTA's abdication of the throne and his departure to Benares, where he passed the rest of his life in religious duties: he reigned four years and nine months.

PRAVARASÉNA,* so named after his grandfather, to whose dominion he had succeeded, was an active and enterprising prince: he invaded the kingdoms of the south, and turned his arms against the son and successor of *Vicramáditya,* named PRATÁPA ŚÍLA or ŚÍLÁDITYA,† whom he drove from his capital, and took prisoner. He seems to have been contented with this expression of his resentment, and not only to have spared the life of the prince, but put him again in possession of his hereditary kingdom, carrying off however the throne of the *Apsarasas,* which he transferred to his own capital.‡ After his A. D. 123—476

* Pirwirsein.—*Abulfazl.*

† I have not been able yet to trace this son of VICRAMA in any other works with much success. Col. Wilford informs me that in the CSHÉTRA SAMÁSA it is stated that *Vicramáditya* had a son named NAT'HA SÍLA whom he is disposed to regard as the grandson of VICRAMA, and the son of this SÍLÁDITYA. A Jain work of some celebrity, the *Satrunjaya Mahátmya,* is said to have been written by order of SÍLÁDITYA, king of SURAT: the author DHANÉŚWARA SURI, according to a marginal note in the copy I consulted, and which agrees with the traditionary opinion of the Jains, wrote his work in the Samvat year 477. The same work cites a prophetic annunciation, that the famous VICRAMÁDITYA would appear after 466 years of his era had elapsed (A. R. ix. 142), which scarcely agrees with the date assigned for the work, as, if SÍLÁDITYA, the son of VICRAMÁDITYA, succeeded his father, it allows but ten years for the reign of the latter. We must revert to this hereafter.

‡ The famous throne supported by thirty-two female images, animated ones, if we are to believe the legend. Accounts agree of its being lost after VICRAMA's death, although it is generally thought to have been found again by BHOJA. We have no further notice of it in our history. *Bedia-ad-din* carries PRAVARA SÉNA to Bengal also, where he subdues *Behar Sinh,* ruler of *Dhacca,* and gives the Government to *Palás Sinh,* son of SÍLÁDITYA, a son of the author's, making apparently the words *Palas* and *Dhac,* implying the same thing, a sort of tree.

return he determined to found a city which should be the capital of his kingdom, and he accordingly constructed the city of *Srinagar*,* on the banks of the *Vitasta*, and embellished it with many palaces and temples; he also threw a bridge across the river. His being the founder of this city is confirmed by the Mohammedan writers, although, as one of them observes, it has undergone many vicissitudes since the period of its foundation. PRAVARA SÉNA reigned 63 years.

A. D. 186—499 The successors of this prince were his son YUDHISHT'HIR, who reigned thirty-nine years and three months, and *his* son NARÉNDRÁDITYA, or LACSHMAÑA,† who ruled thirteen years; he was succeeded by his younger brother, to whose reign the extravagant period of 300 years is assigned; an extravagance A. D. 237—545 the more remarkable, as it is without a parallel in our author's chronology,‡ and which must therefore have been suggested, either by a necessity for filling up some dark chasm in the annals of *Cashmir*, or to compensate for an error in the dates of the preceding monarchs, who may have been placed two or three centuries too soon: both causes may perhaps have united for this extraordinary departure from those bounds of possibility, which in all other reigns have been preserved.

The length of RAÑÁDITYA's reign is not the only marvel attached to that prince; he had been in fact, in his former life, a man of dissipated habits, but at last, by his devotion to *Bhramaravásiní*, a form of DURGÁ, obtained, as a reward, his resuscitation in a royal race, and the goddess herself as a consort, incarnate as *Rañarambhá*, the daughter of RATISÉNA, king of *Chola*.§

* "The city, which in the ancient annals of India was known by the name of *Serinaghar*, but now by that of the province at large, extends about three miles on each side of the river *Jelum*, over which are four or five wooden bridges."—*Forster* ii. 9.

† Jewdishter, Lekhmen, Zebadut.—*Abulfazl.*

‡ Unlike the early periods of the Persian Chronicles, in which such a term is far from uncommon.

§ The traditions of the South intimate occasional connexions of a like character between the Chola and Cashmir princes. One of the former entitled in one account *Saśi Séc'hara* and in another, *Rájadi Rája Chola* was married, it is said, to a daughter of the King of Cashmir.

The divine nature of his queen was the immediate cause of the king's protracted reign, as she conferred upon him the *Pátála Siddha Mantra,* by which he was enabled to extend his life as long as he pleased. At last, however, satiated with this world, he entered the cave of *Namuchi,* in the bed of the *Chandrabhága* river, through which he passed to *Pátála,* and acquired a kingdom in the infernal regions: his wife, regarded rather inconsistently as a *Sacti* of *Vishnu,* went upon her husband's death to *Swétadwipa.* The claims of the next monarch to the throne of Cashmir are not stated by our original, and the enumeration of his genealogical progenitors warrants a suggestion that he might have not been the immediate successor of RAŃÁDITYA; he was the son of *Vicraméswara* the son of *Vicramácranta Viśwa,* and is named himself *Vicramáditya,* a strange series of appellations, and a further proof of some unaccountable blank in the *Cashmirian* records: VICRAMÁDITYA reigned 42 years, and was succeeded by his younger brother BÁLÁDITYA.* A. D. 537—568 A. D. 579—592

BÁLÁDITYA was a prince of a warlike character, and erected his pillars† of victory on the shores of the eastern sea:‡ one result of his victorious excursions was his compelling the subjugated monarchs to beautify CASHMIR, and

* Beckermadut.—Baladut.—*Abulfazl.* The Mohammedan writers agree with the text except BEDIA-AD-DIN: he assigns a life of 165 years to this monarch, and a reign of no more than 40 years: he places also the 30th year of his reign as contemporary with the first of the *Hijra,* and describes his sending an embassador to *Mohammed.*

† *Jayastambha,* the Pillars of *Sesac* and the Trophies of the Greeks and Romans: that it was the custom of Hindu princes to erect these pillars is established by concurrent testimonies, and it is probable that it is to this practice we are to ascribe the origin of several solitary stone columns still met with in India, as the *Lat* of *Firoz-shah,* the Cuttab *minar,* the pillar at Allahabad, and those in Tirhut, and other places: in general however they were constructed, like the wooden trophies of the Greeks, of less durable materials, and as observed by Plutarch, "Time has gradually effaced these memorials of national hostility."

‡ I am especially afraid of my manuscript here: it is alone, in this section of the history, and is very inaccurate. It is said that this prince conquered *Bancala* or Bengal, a very uncommon name, however, in Hindu books of any period, *Gaur* or Banga being the usual term.

to construct temples and edifices for the accommodation of such of their subjects, as might visit that kingdom.*

It was foretold to this prince by an astrologer, that he should be the last of the race of *Gonerda*, and his only daughter should transfer the kingdom to a different dynasty of princes.† The monarch was not well pleased with this prediction, and resolved to prevent its fulfilment, by refusing to grant his daughter in marriage at all: his precautions were unavailing: a descendant of CARCOTA NÁGA and protegè of the monarch, succeeded in obtaining privately the affections and person of the princess, and the assistance of the chief officers of state secured his accession to the throne, upon the death of the king, which happened shortly afterwards.

SECTION II.

A.D.616. DURLABHA VERDDHANA,‡ the descendant of *Carcota*,§ thus obtained the princess and the kingdom, and founded a new and powerful dynasty: his reign was chiefly distinguished by his encouragement of religion, and the temples he founded, or the endowments he bestowed upon the Brahmans. He reigned 36 years, and was succeeded by his son.

* Consistently with the former chronology *Bedia-ad-din* makes this prince contemporary with *Yezdejird*, from whom he wrested the north eastern districts of Persia, but he confounds *Báládítya* with *Pratápáditya* here, and passes over the intermediate monarch altogether.

† We have seen however the crown repeatedly pass into different families, and therefore our author nods; unless indeed he considered the princes so described, as members, not of a different race, but of other branches of the Gonerdiya stock.

‡ Dirleyir Dirwun.—*Abulfazl.*

§ *Carcota* is one of the *Nágas* or Serpent demigods: the name occurs, as well as *Nila*, in the list of them in the *Mahábhárata*: a temple at *Benares* is also dedicated to this serpent deity.

PRATÁPÁDITYA* was the founder of PRATÁPAPUR, converted by local pronunciation into *Tapar*, according to the Mohammedan authorities. In this new city a merchant named NONA, of the *Rauhitya* race, took up his abode, and founded a college for the residence of *Rauhitya Brahmans*. Of the wealth of the trader it is stated as a proof, that on one occasion he lighted up his house with diamonds to receive the king, whom he had heard formerly complain of being inconvenienced by the smoke of the ordinary lamps. The familiarity between the prince and merchant led to some unexpected results: the former fell deeply in love with one of the merchant's women, and being unwilling either to commit a breach of hospitality, or to forfeit his fair name by a vicious act, he struggled with his passion and endeavoured to subdue it; the contest induced a fever, which threatened his life; he was saved however by the generosity of his friend, who learning the cause of his disease, not only yielded up the woman to the king, but exerted no small ingenuity in argument to persuade him to accept her: his logic however, made a due impression, and *Naréndra Prabhá* was elevated to the royal bed: it was a fruitful one, as she bore the king seven sons, *Chandrápíra, Tárápíra, Abhimuctápíra, Amuctápíra, Vajráditya, Udayáditya*, and *Lalitáditya;* several of whom succeeded in time to the crown. PRATÁPÁDITYA died after a reign of 50 years. A.D.652.

CHANDRÁPÍRA,† the eldest son and successor of the last monarch, was a prince of exemplary mildness and equity. He punished his own officers, for encroaching on the tenements of a *Chamar*,‡ or worker in leather, in preparing the site of a temple which he wished to erect, and which design he was prepared to abandon if the consent of the leather-worker could not be obtained. A liberal reward and his personal solicitation obtained the acquiescence of the *Chamar;* his ground was duly made over to the king, and the temple was completed. We have another legend of his equity, and dis- A. D.702

* Pertaubadut.—*Abulfazl.*

† Chandranund.—*Abulfazl.*

‡ Who as an out-cast could have no rights under a strict Hindu administration.

crimination respecting the means employed by him, to detect the murderer of a Brahman, but it need not be here repeated, as the story has been told by *Abulfazl.** CHANDRÁPÍRA enjoyed the short reign of no more than eight years and eight months, and was succeeded by his brother TÁRÁPÍRA,† a violent and oppressive sovereign, and an enemy of the priesthood: his reign was fortunately a limited one, and extended to no more than four years and a few days.

A third brother LALITÁDITYA‡ succeeded to the crown: he was a prince of great celebrity, and established by the vigour and success of his arms, his

* *Ay. Ac.* ii. 175. I do not find in my copies, the description of the punishment awarded. *Abulfazl* says the murderer was branded in the forehead with the figure of a headless man, and that something of the kind was inflicted appears from the context, from which a stanza has been probably omitted: the punishment is according to law, which on no account permits the infliction of capital punishment on the person of a Brahman, but substitutes brands, exile and disgrace.

In the *Danda Vivéca* the Law is thus laid down from ancient authorities.

महापातक युक्तोपि न विप्रो वधमर्हति। निर्वासनाङ्क मौण्ड्यं तस्य कुर्यान्नराधिपः॥ बृहस्पतिः॥

A Brahman guilty of the greatest crimes is not to be put to death; let the king have him shaved, branded, or exiled.—*Vrihaspati.*

ब्राह्मणस्य ब्रूणहत्या गुरुतल्प सुवर्णस्तेय सुरापानेषु कवन्ध भग श्वपाद ध्वजास्तप्तेनायसेन ललाटे ऽङ्कयित्वा स्वविषयान्ते निर्वासनम्॥ बौधायनः॥

A Brahman who causes abortion, defiles the bed of his teacher, steals gold, or drinks spirits, must be branded with a hot iron on the forehead, with a headless figure, the vulva, the foot of a dog, or a flag, (the vintner's sign) and then be banished.—*Baudháyana.*

अशिराः पुरुषः कार्यो ललाटे द्विजघातिनः। गुरुतल्पे भगः कार्यः सुरापाने सुराध्वजः। स्तेयेतु श्वपदं कृत्वा शिखिपित्तेन पूरयेत्॥ नारदः।

A headless man is to be stamped on the forehead (of a Brahman) who kills a Brahman; the vulva on his who defiles his Guru's bed; a flag on his who drinks wine, and the foot of a dog on his who commits theft; filling the scar with *Sichipitta* (Peacock's bile, or possibly some caustic substance.)—*Nareda.*

† Taranund.—*Abulfazl.* ‡ Lultadut.—*Ibid.*

claims to the supreme sovereignty of India, having made with his victorious armies the triumphant circuit of Hindustan. His first scene of action was in the *Antervédi* country, the diadem of which he placed upon his own head. He then turned his arms against YAŚOVERMÁ, at that time sovereign of *Canouj*, a prince distinguished for his literary accomplishments, and the patronage extended by him to such eminent Poets, as CAVIVÁCPATI, RÁJÁ SRÍ and BHAVABHÚTI.* A peace was soon agreed upon between the monarchs but as speedily violated: some informality in the address of a dispatch from YAŚOVERMÁ to LALITÁDITYA having excited the latter's resentment, led to a renewal of hostilities, and the total subversion of the kingdom of *Canouj*.

Although thus occupied in foreign war, the prince appears to have devoted some attention to the details of domestic administration, and to have made a new arrangement of the great offices of his court: over the eighteen branches of the government, he instituted five principal departments, the *Mahápratiharápíra*, or office of high chamberlain; *Mahásandhivigraha*, that of chief minister, or supreme administrator of peace and war; *Maháswaśálá*, of the Royal stables, or of master of the horse; *Mahábhándágára*, of the high keeper of the treasury or arsenal, or perhaps both; and the *Mahásádhanabhága*, an office of which the nature is not fully conveyed by the nomenclature, but which may perhaps be the supreme directorial or executive administration. *Sáhi* and others were the officers invested with these high functions.

* The two former of these are unknown. The third is celebrated as the author of the *Málati Mádhava*, and the *Uttara Ráma charitra*. He might have been at the court of *Canouj*, but he was of a *Berar* or *Viderbha* family: he is usually considered as contemporary with *Cálidása*, and in the *Bhoja Prabandha* is brought to *Bhoja's* court. His own works however afford no reason to suppose he was cotemporary with either CALIDÁSA, or BHOJA, and with respect to the latter, furnish grounds for inferring the prior date of the Poet. The *Rája Taringini* is therefore probably correct in placing him about A. D. 705 or nearly two centuries before the probable period of BHOJA's reign. YAŚOVERMÁ himself is not known, unless he be the same with KIRTIVERMÁ, an appellation of like import, and a prince who is mentioned in the opening of the *Prabodha Chandrodaya*.

YAŚOVERMÁ, after the subjugation of his kingdom, fled across the *Yamuna,* and nothing more is mentioned of his history: his victorious antagonist followed up his success by an expedition to the shores of the eastern sea: thence marching through *Calinga,* the Royal Elephants advanced upon the kingdom of *Gaur,* and effected its subjugation. LALITÁDITYA thence proceeded southwards, and invaded *Carnáta,* then subject to a queen named RAŤŤÁ, who submitted to the invader, after having seen her strong holds in the *Vindhyá* mountains unavailing to resist him; her submission having disarmed the king's resentment, her beauty secured his favour, and she was restored to her dominions. The army then marched to the banks of the *Cáveri,* whence crossing the *Sandal* mountains, the king subdued the coast and the Islands opposite: having reduced the seven *Cramucas,* and seven *Concanas,* LALITÁDITYA continued to follow the shores of the western sea to *Dwáracá,* which he entered to the delight of his soldiers: he then crossed the *Vindhya* mountains, and occupied *Avanti,* whence having made the circuit of India, and received the homage of its numerous princes, he now directed his steps to the north: his march was a series of conflicts and triumphs: he was successively assailed by the princes of the country, like another *Indra* engaged in clipping the wings of the hostile hills: the studs of *Cámboja* were vacated at his approach, and *Bukhara* was deserted by its high-crested steeds: after three successful battles in as many days, he respected the *Musselmans,* and directed his attention to other quarters.* The pale-faced *Bhottas* scarcely attracted his regard, as the cold wind, impregnated with the blossoms of the safflower, and the secretion of the Musk deer, fanned the tresses of his soldiers: the city of *Pragjyotish* was empty on his arrival, and he turned thence to the *Strí Rájya,* where the queen and her subjects triumphed over the monarch and his soldiers, by other weapons than those of war: after a short delay in that country, he

* *Bedia-ad-din* carries him into Khorasan to aid Yezdejird, but he retreats before the fame of the Arab invaders.

advanced to the realms of *Uttara Curu,* whence satiate with glory, and laden with plunder he returned to his own dominions.*

On his return to *Cashmir* LALITÁDITYA rewarded his principal officers by bestowing upon them subordinate kingdoms: in this way he conferred upon his dependants the principal cities of *Jalandhara* and *Lahora* (Lahore:) he also devised particular marks to be borne by the different tribes, as characteristic of their submission to his power. Thus the *Turushcas* were obliged to shave half the head, and the *Dekhinis* to let the ends of their waist cloth hang down like a tail behind, and these distinctions are still

* Whatever may be the truth of the military excursion of this Prince, the account of it given in the original, which has been here followed as closely as the state of the manuscript would admit, is a very curious specimen of the author's geographical accuracy and knowledge, and throws some light upon the state of India at the period at which he wrote: it may therefore be worth while to revise his track: from *Canouj* through the eastern districts of the present Company's possessions, *Lalitáditya* may be supposed to have marched to the delta of the *Ganges,* and *Berhamputra,* where we have what our author calls the Eastern Sea; and the coast along the upper part of the bay of Bengal, therefore, constitutes the country that he calls *Calinga,* whence a slight deviation to the right brings him easily to *Gaur,* equivalent in its widest sense, to the greater part of the modern Bengal. The transit hence to *Carnátá* is rather a considerable stride, although it is obvious that the upper part of the Peninsula is intended, by reference to the *Durgas* of the *Vindhya* chain of mountains, unless indeed we extend the term to the eastern Ghauts, which may be considered as lateral processes from the main ridge; as indeed the next stage is the *Caveri* river, we come then to the southern limits usually assigned to the ancient *Carnátá* kingdom. The Sandal or *Malaya* mountains are the western Ghauts, over which as the king marched from Mysore he would necessarily come into the *Concan:* the seven divisions of which, as well as the seven *Cramucas,* are something new to us, although from the voyages of the two Arabians, and of the early Portuguese and Dutch adventurers, we know, that that part of the Malabar coast was divided amongst a great number of petty sovereigns. The seven *Concanas* are indeed known in the Dekhin still, and comprehend the whole of the Parasu Rama Cshetra, or the greater part of the Malabar coast: they are named *Kérala* (Malabar), *Tulunga* or *Tuluva, Gova Rashtra* or Goa, *Concana* proper, *Kerátaha, Varalatta* and *Berbera;* the seven *Cramucas,* it might have been conjectured, were connected with the term *Cranganore,* but the original name of that province is properly written *Corangalur* कोडङ्गलुर, and they possibly signify some of the groupes of islands off the coast of Malabar; the island of *Dwáracá,* in Guzerat, the kingdom of *Crishńa,* is the next stage, and was visited more in veneration than enmity: from hence across the *Vindhya* mountains the king comes to *Oujein:* his march to the north, or rather northwest, brings him to *Camboja;* according to Wilford (A. R. viii.

observed:* if he thus treated the vanquished with some contumely, he made amends by his munificence, for there was no part of India, where

336,) the ancient *Arachosia*, and unquestionably a country in that direction, a country bordering on India, to the northwest, and inhabited by impure or foreign tribes, famous also for its breed of horses, a large strong breed of which is still reared in the countries between Persia and India. *Bhukhara* is the Persian *Bokhara* or *Bucharia;* the word rendered in the text *Musselman* is written in the original *Mussuni* or *Mussulli:* it is intended by our author as the name of a person, for it occurs again in the reign of LALITÁDITYA's grandson JAYÁPÍRA, who is said in the original to have had *Mussuni* and others as chiefs of his nocturnal guard: at the same time the recurrence of the name after such an interval, indicates rather more than one individual, and is an argument in favor of its being a generic appellation: according to *Narain Cul* it should be *Momunkhan*, Governor or Prince of *Bokhara:* if he is right, it should be *Al-maimun* of the house of *Abbas* that is intended, and who long resided in *Khorasan*, but about a century after the reign of *Lalitáditya*, according to the chronology of our text: the correction that would thus be required does not however seem to be indispensible, as our author's history here, allowing for national partialities, is very strongly supported by the general histories of the Mohammedan writers. At this very period, or from 697 to 712, the generals of *Hijaz*, the Governor of *Khorasan*, were engaged in active hostilities with their neighbours, both to the north and east, or in *Bokhara* and *Cabul*, the Hindu prince of which latter makes a distinguished figure in several transactions, (*Price's Mohammedan History*, i. 454 &c.) Such a general coincidence is as much as can be expected, for names are most deplorably disfigured by both Hindu and Mohammedan writers, and events, especially when remote in place and time, are not investigated by either with much accuracy or care. LALITÁDITYA's next route through *Butan* is rather a remote one, except we suppose the name *Bhoteas* to be applied to the hill tribes on the northern side of the *Himalaya:* the route is practicable enough, and would be much the same as that followed by the Lamas in 1712, and by which a considerable intercourse between Cashmir and Chinese Tartary is still maintained, (*see Moorcroft's Travels*): that the Bhoteas are scattered through this line we know from late authorities. Hamilton observes that the Bhoteas occupy every where between the hills and the Tista the Alpine region on both sides of the Indus, (*Hamilton's Nepal*, 58); and Fraser mentions that *Hymap*, a valley, containing a great number of Bhotea villages, is only four day's journey from the Capital of Cashmir (*Fraser's Himala*, 308): however our author evidently intends to carry his hero into *Bootan* proper, a journey of considerable extent although probably not so much so as it appears by the maps we yet possess; *Pragjyotish* is considered to be *Gohati* in Asam, (A. R. viii. 336,) the *Stri Rajya* is probably *Tibet*, where customs similar to those of the *Malabar* Nairs prevail, (*Turner's Embassy*, 349); it may however be *Nepal* or almost any portion of the Himalaya, (*Kirkpatrick*, 187, *Fraser*, 70, &c.) where the same practice exists, but as the march leads off from Asam apparently to the north, we may regard this region to be Tibet. Of Uttara Curu we shall have further occasion to speak.

* The neighbouring Mussulmans like most Mohammedans indeed, do shave the centre of the head still, and the people of the coast wear their lower garments long: that these habits were

he did not erect statues and temples of the Gods: a very long enumeration ensues of these proofs of his liberality, of which it will here be necessary only to particularize a few. He founded the cities of *Sunischitapura*, *Derpitapura*, *Phalapura*, *Lalitápura* and *Parihásapura*: in *Hushcapur* he erected an image of *Mucta Swamí*, and one of *Nrihari* in the *Stri Rájya*. In the *Bhumi Gráma*, he built the temple of *Jyéshta Rudra*, and over and along the *Vitastá* he built bridges and stone ghats. *Parihásapura* was his favorite work; in this city, he built a palace of unhewn stone, and a variety of royal and religious edifices: he raised a column of one stone, 24 cubits long, and bearing on the summit an image of *Garuda*: he placed in the temples images of metal; one of VISHNÚ as PARIHÁSA CÉŚAVA was made of pure silver, weighing 1000 palas, and another colossal figure of BUDDHA was constructed of 1000 *Prast'has* of brass; a figure of HARI with flowing hair, was set up of gold, and another golden image was made by him of the same deity in the *Varáha Avatár*. His example was imitated by his queens, by tributary princes, and by his ministers, one of whom, a second *Jina*, named CHANCUNA, a native of *Bokhára*, erected a *Vihar*, and set up in it an image, made in *Magadha* or Behar, called indifferently by our author *Jina Vimba* and *Sugata Vimba*, and therefore of undetermined character as to its being of *Bauddha* or *Jaina* manufacture, although most probably the former: the foundation of *Parihásapur** or *Parrispur* and its embellishment by this prince are recorded by the Mohammedan writers, of whom MOHAMMED AZIM adds,

imposed by the kings of *Cashmir* may be denied even on Hindu authority. In the *Hari Vansa*, a portion of the *Mahabharata*, and certainly much older than the work before us, the following account is given of the imposition, of the distinguishing modes of wearing the hair, upon the tribes of *Mléchch'has* or foreigners: "The king *Sagara* in obedience to the orders of his *Guru*, *Vasishta*, deprived the *Mléchch'has* of their institutes, and imposed upon them these marks: the *Sacas* had half the head shaved, the *Yavanas* and *Cambojas* the whole of their hair taken off, the *Paradas* were ordered to wear beards." These customs might perhaps admit of verification, and might enable us to identify the tribes. Some of the Greeks were from a remote period accustomed to shave the fore part of the head: the mountaineers of the Himalaya shave the crown, as do the people of *Caferistan* with the exception of a single tuft, and some of these people, which is a curious coincidence, are called Caumojees, (*Elphinstone's Cabul*, 619 and 625); they also some of them wear beards five or six inches long. The Persians also wore long beards in the time of *Ammianus Marcellinus*, as they do still.

* *Purrispoor* is mentioned in the *Ay. Ac.* ii. 159, with the addition that a lofty idolatrous temple stood there, which was destroyed by SECANDER. *Refi-ad-din* also converts the column into the minarets of a temple.

that the fragments of the pillar of *Garuda* were visible in his time: the statue of SUGATA also remained to the period in which our author wrote.

LALITÁDITYA is the subject of many marvellous stories, one of which reminds us of the exploit of Zopyrus: the minister of the king of *Sicata Sindhu*, probably of *Tatta*, presented himself in a wounded and deplorable state before the king, upon one of his expeditions. LALITÁDITYA took him into favor; in return for which he offered to lead the army across the desert, against his native country, and his offer being accepted, he directed the king to provide water for a fortnight's march; at the expiration of the fortnight the army was still in the midst of the sands, and the men were perishing with thirst, the guide acknowledging that he had been employed by his sovereign to effect the destruction of the king and his host: the attempt of the enemy was foiled, however, by the discovery of some springs, and the king returned in safety to *Cashmir*, after punishing his treacherous guide; the springs then opened were said to exist in our author's time, and to form a considerable stream running to the north called *Kuntaváhiní*.*

LALITÁDITYA, although the substantial proofs of his devotion left no doubt of his piety, was yet not free from faults: amongst other defects he was addicted to wine, and in one of his drunken fits he ordered the city *Pravarapur* founded by *Pravara Séna* to be burnt, that it might no longer emulate the splendour of his own capital. His orders were carried rigidly into effect, to his own deep regret when sobered—and as one proof of the sense he entertained of the transaction, he immediately issued positive commands, for his officers to disregard any mandates whatever, that he should promulgate, whilst under the influence of wine.†

We have an account, in this part of LALITÁDITYA's reign, of some tu-

* The story is but imperfectly told here, but the text is so corrupt, I should scarcely have ventured to select even the above, had I not been countenanced by *Narain Cul*, who translates the story in much the same way, altering the name of the country to *Maruca* (that is, a desart tract) on the ocean.

† So it was related of *Trajan*, who indulged in a similar propensity. Vinolentiam prudentiâ molliverat, cuari vetans jussa post longiores epulas.—*Aurelius Victor.*

multuous affray having taken place in his capital, between the followers of different deities: the exact nature of it does not satisfactorily appear from the imperfect condition of the manuscripts, but there seems to have been a conflict between a number of *Bengali* pilgrims, who had come with their prince to *Cashmir* to visit a temple of *Saraswatí*, and the people of the city: the former had made an image of *Parihása Hari*, and broken one of *Ráma Swámí*, and to punish the latter act the citizens assailed them: the *Bengalis* appear to have had the advantage, as the desolated temple of *Ráma Swámí* continued to bear witness to their success, and the world was filled with the fame of the exploit: the author of the *Wakiat-i-Cashmir* calls the king of *Gaur*, GOŚÁLA, without however assigning any authority for the appellation.*

The death of LALITÁDITYA was worthy of his active reign: he resolved to explore the uttermost limits of *Uttara Curu*, the regions inhabited by the followers of CUVÉRA, and equally inaccessible to the steps of man, and the rays of the sun:† he accordingly marched northwards, crossing the mountains inhabited by the *Dámaras*, whom he describes in a letter to his ministers as a fierce intractable race, lurking in caves and fortified passes, possessed of considerable wealth, and equally devoid of government or religion: in the same dispatch he announces the probability of his not returning, for, he observes,

* The same work speaks of it as a hostile incursion of the Bengalis, and *Narain Cul* has the same, ascribing that event to the design of revenging the death of their king, who had been invited publicly, and privately put to death by LALITÁDITYA, one of whose faults, he says, was that of disregarding oaths and agreements: a not uncommon failing in princes of LALITÁDITYA's ambition. *Bedia-ad-din* agrees with the latter author. There may possibly be some connection between this transaction and what is recorded in the *Sancara Digvijaya* of the reformer ŚANCARA ÁCHÁRYA, who, it is said, visited *Cashmir*, and in despite of strenuous opposition, seated himself on the throne dedicated to the Mos Learned, in the temple of SARASWATÍ. The place corresponds, so probably does the date: names only may have been changed.

† This Hindu *Cimmeria* is of course the land of fable, but as far as it may be supposed to have a real prototype *Uttara Curu* seems to imply the northern portion of Russian and Chinese Tartary. The name however appears to have been known nearer home, and to have been applied to the North Eastern portion of the *Himála* mountains. Ptolemy places in that position a nation called the Ottorocoræ amongst mountains of the same name, and *Ammianus Marcellinus* calls the same mountain Opurocarra. It is not impossible however that they intend the northern part of *Asam* called *Uttaracora*, *Uttaracola* or *Uttaracul*. LALITÁDITYA probably perished amongst the chasms and snows of the *Himálaya*.

there are no limits to the advance of the ambitious, as there is no return of the water, which the rivers, running into foreign countries, bear far away from its native springs. In consequence of this expectation, he directed the ministers to crown his son, CUVALAYÁDITYA, with which order they sorrowfully complied. The king's anticipations were realized : neither he nor his army ever returned, and their fate was never exactly known. Some reports say, that he was slain in battle; others that he and his host were overwhelmed and lost in a heavy fall of snow in *Áryáńaca.* Some persons believe that he burnt himself, whilst others credit the tales that carry him to the farthest north, to those climes that are easily accessible to the immortals only, and speak of the wonders there seen and performed by him, and the final destruction of him and his troops. LALITÁDITYA reigned 36 years and eight months : he was a popular prince, and much beloved by those about his person: his chief ministers were all deeply afflicted by his loss, and one of them, MITRA ŚERMÁ, disdaining to survive his master, drowned himself at the confluence of the *Sindhu* and *Vitastá.*

A D. 751 CUVALAYÁPÍRA,* the son of LALITÁDITYA by CAMALÁDÉVÍ, succeeded to his father; in the first days of his reign, apprehending the rebellion of his brother, a prince of a more active and violent temper, he put him and his mother *Chacramerdicá* into confinement: thus relieved from the fear of domestic disturbances he began to contemplate foreign acquisitions, when he was diverted from his purpose by a change in the tenor of his reflections: having been thrown into a paroxysm of fury by an act of unimportant disobedience, in one of his ministers, he reflected, when he became calm, upon the folly of yielding to the impulses of passion: his meditations extended farther, and convincing him of the futility of human power, and the shortness of human existence, he determined to exchange his kingly throne for the cell of an ascetic. Having adopted this determination, he withdrew to the mountain *Dricpat'ha,* leaving, after a short reign of little more than a year, the crown to his brother VAJRÁDITYA.†

* Kalyanund.—*Abulfazl.* † Bijradut.—*Ibid.*

This prince was of a cruel and abandoned character: he expended his paternal treasures upon sensual gratifications, and drained *Parihásapur* of its valuables and money, to purchase women for his haram: to raise money also he sold great numbers of his subjects to the *Mléchch'has*, and propagated through the country, tenets and practices, fit for them alone: fortunately his reign was a short one, lasting only seven years.

PRITHIVYÁPÍRA,* the elder son of VAJRÁDITYA, by the queen *Manjáricá*, succeeded his father, both in the throne and in his habits of life: at the end of four years, however, he was dethroned by his brother SANGRÁMÁPÍRA, the son of MAMMÁ, one of VAJRÁDITYA's concubines apparently; this prince reigned seven years, and was succeeded by his younger brother,

JAYÁPÍRA,† a monarch who was emulous of his grand-father's, LALITÁDITYA's, renown. Shortly after his accession, this prince marched upon an expedition against his neighbours: his army was numerous and well appointed, but not equally so with those which LALITÂDITYA had commanded, as a proof of which some of the elderly citizens observed to the king, who had questioned them on the subject, that he had but 80,000 litters with his army, whilst his grand-father had 125,000. He proceeded however on his expedition, and when he had marched some distance, JAJJA‡ his wife's brother, availed himself of the opportunity to usurp the throne, and prepared for the maintenance of his unjust pretensions. JAYÁPÍRA's first determination, on receiving intelligence of the usurpation, was to march back to *Cashmir*, but on taking a review of his army, he found so many soldiers had deserted him, that he was not in a condition to vindicate his rights; he therefore disbanded the troops yet adhering to him, and with a few faithful followers retired to *Prayága*; arrived here, he gave to the Brahmans, the horses lately belonging to his army, amounting to 100,000 all but one, the grant declaring that whoever should give an entire *lac*, might efface the seal of JAYÁPÍRA, and substitute his own: this grant he committed to the Ganges, the

A. D. 773.

* Pertooanund. Sungranund.—*Abulfazl.*

† Jeyanund.—*Ibid.* ‡ Jujnund.—*Ibid.*

waters of which were rendered purer by the ingredient: after a short residence at *Allahabad* he dismissed his attendants, and determined to seek his fortune by himself.

The adventures of JAYÁPÍRA at *Paundraverdhana** then the residence of JAYANTA, king of Gaur, are the next subjects of our original, and are narrated with a prolixity that we need not emulate; he arrived alone and in humble attire at the city, where his dignified person and manner, attracted the notice of one of the female dancers of a temple, by whom he was taken home and supported: whilst in this situation he killed in private encounter a lion that had alarmed the whole city, and having in the conflict lost one of his bracelets, on which his name was inscribed, he was thence discovered by the emissaries of JAYANTA, and carried before that monarch; his reception was highly favourable. JAYANTA gave him his daughter in marriage, and furnished him with an army for the recovery of his paternal dominions, to which he was also invited by DÉVA ŚERMÁ, the son of MITRA ŚERMÁ, deputed for that purpose by the nobles of *Cashmir:* he accordingly set forth on his return, the goddess of victory in his van; and in his rear, the two terrestrial goddesses, *Calyánandá*, the princess his wife, and *Camalá* the dancer, whom out of gratitude he had also espoused: at a village called *Susticala* on the borders of *Cashmir*, he was opposed by the usurper, and a series of conflicts ensued without being attended, for several days, with any decisive result; at last *Sridéva*, a *Chandála*, the head-man of a village, who had joined the king, made his way to the spot where JAJJA was stationed, and struck him from off his horse with a stone. *Jajja* fell dead upon the field, his followers fled, and JAYÁPÍRA after an interval of three years was again acknowledged as monarch of *Cashmir*.

The cares of JAYÁPÍRA were now directed to the cultivation of letters, and the improvement of his kingdom: he devoted much of his time to study, and made himself a proficient in Sanscrit Grammar, under CSHÍRA, a learn-

* A city in Behar, it is believed, but *Magadha*, in that case, must have been subject to the kings of *Bengal*, whose power about the time in question, the beginning of the ninth century, does appear to have been so extensive, (see the Mongir Grant, A. R. i. 123, and Mr. Colebrooke's remarks on it, ix. 427.) JAYANTA however does not occur amongst the *Pála* princes, in those authorities, nor in Abulfazl's list, (Ay. Ac.) unless in the latter some of the names are erroneous; a circumstance very probable.

ed teacher.* He invited scholars from foreign countries and so many flocked to him as to occasion a dearth of *Panditas* every where, except in *Cashmir:* the chief of the assembly was *Bhatta*, and he was assisted by DÁMODARAGUPTA; the principal poets were MANORATHA, SANC'HADENTA, CHÁTACA and SANDHIMÁN, whilst VÁMANA and others were amongst his ministers.† The principal foundation of his reign was the fort of *Jayápura*, in the construction of which he was assisted by artists sent him by VIBHÍSHAŃA, the *Rácshasa* monarch of *Lanca*, whilst ACHU, the son-in-law of PRAMODA king of MATHURA, and JAYADATTA one of the king's principal ministers, contributed to its embellishment; the one by a temple of SIVA, and the other by a Brahminical college: besides this, JAYÁPÍRA built *Malhanapur* in *Cashmir*, and his wives founded the cities *Calyánapur* and *Camaláپur*, places named after themselves.

After a short period of tranquillity, JAYÁPÍRA resumed his military enterprises: his first exploit was the reduction of a strong fort belonging to BHÍMA SÉNA, king of the eastern region, and he thence proceeded against ARAMURI, the magician, king of *Nipal*,‡ whom, at the end of two or three days march, he found posted with his forces on the southern bank of a river: the appearance of the enemy inflamed the courage of the king to temerity; without a previous knowledge of the country, he rushed into the river, and left his bravest warriors behind him; the stream at first was no

* This name is not known unless *Cshira Swámi*, the commentator on *Amera*, be intended; the conjecture is supported by the nature of his instruction, and qualifications, the author calling him शब्दविद्योपाध्यायः or teacher of the science of words.

† It is not practicable to ascertain with any degree of certainty, any further particulars relating to the individuals named in the text. BHATTA is a title rather than a name, and is applied to several authors known to be natives of Cashmir, as MAMMATA Bhatta, the author of the Kavya Prakása, and others. DÁMODARA may be the author of the musical work called *Sangíta Dámodara* and there is a VÁMANA Acharya, who is the author of a set of poetical *Sútras* and of a *Vritti* or gloss upon them. The poetical propensities of the prince accord with the character of these writings: the other names offer nothing even for conjecture.

‡ There is no such name however in *Kirkpatrick's* lists of the *Nepal* kings.

more than knee deep, but it suddenly rose, and swept away the king and his army: the greater part of the soldiers were drowned. The king, continuing to struggle with the waves, was carried down the stream: the cries of one army were echoed by the shouts of the other, and some soldiers of the enemy mounted on inflated skins, rushed into the torrent, and captured the drowning prince: he was dragged to the shore, and confined in a strong castle on the banks of the *Gandicá*,* his broken and dismayed army retreating hastily to Cashmir.

The return of the troops, carrying the news of their discomfiture, and of the captivity of the king, spread consternation throughout *Cashmir:* the ministers immediately assembled to deliberate on what was to be done, when Deva Śermá, the son of the faithful Mitra Sarmá, undertook to effect the liberation of the monarch: for this purpose he wrote to Aramuri, holding out promises of securing to him both the kingdom and treasures of Jayápíra, if admitted to his presence. The terms were readily accepted, and the minister attended by a considerable body of forces, entered *Nipal;* his army he led to the banks of the *Gandicá*, opposite to the fort which held his master captive, whilst he himself repaired to the court of Aramuri: at a private conference with the king of *Nipal*, Deva Śermá represented to him, that the treasures of *Jayápíra* were with the army, but their amount and distribution were known to Jayápíra alone; that it would be advisable therefore for him to have an interview with that prince, and learn from him under some plausible pretence, these particulars, as otherwise the money might be lost or embezzled, and Aramuri be disappointed of a valuable prize. The *Nipalese* was deceived: orders were given for Deva Śermá to be admitted privately to Jayápíra, and the minister thus found himself in his master's presence.

In the interview that followed, Deva Śermá urged the king to let him-

* Possibly the *Gandaci* or *Ganduck* river: if however the fort of *Bhimasena* should be *Bime* near Nagracot, this appellation must be applied to some other river.

self down from the window of his prison, and swim over the river to his troops, but JAYÁPÍRA urged its impracticability, not only on account of the height of the window from the ground, but the impossibility of crossing the torrent without assistance: after some discussion, the minister withdrew, purposing professedly to return, but as a considerable interval elapsed during which he did not appear, the king went to seek him, and found him dead on the floor of an adjoining chamber, strangled with his own turban: beside him lay a leaf, on which he had written these words with his nail; "You must effect your escape; I die to enable you: my body inflated with your breath will serve you as a float, tie yourself with my turban, and quickly cross the river." Penetrated with admiration at the proof of attachment, and with grief for the loss of so faithful a friend, the king obeyed his posthumous counsel, and safely effected a junction with his troops: eager to wipe off his disgrace he fell upon the unprepared and astonished Nepalese, killed their king, and left their country a depopulated waste.

Returning to *Cashmir* JAYÁPÍRA spent some time in the enjoyment of the treasures he had acquired by the late expedition, when an extraordinary occurrence gave a new complexion to his character, and changed him into an oppressive and extortionary prince. MAHÁPADMA the *Nága* appeared to him in a dream, and implored his aid against a magician of *Drávira*, whose enchantments sought to secure the person of the *Nága*, and carry him off. MAHÁPADMA promised the king as a reward for his protection, that he would reveal to him the existence of a gold mine, and then disappeared. In the morning, the king not quite satisfied of the veracity of the *Nága*, sent for the magician, and desired him to shew him the person of the snake God: this the magician effected; the waters of a lake retiring at his command, exposed the *Nága* and his serpent train. JAYAPÍRA however would not allow the magician to seize his prey, but ordering him to recall the waters of the lake, gave him a liberal recompense, and sent him to his own country. The *Nága* soon visited him again in his slumbers, but instead of a mine of gold, he punished him for his want of faith, by discovering to him the site of a copper mine, a source of considerable though infe-

rior wealth: the mine was accordingly wrought, and in the course of his reign the king coined 100 crore of Dinars* less one, challenging all the princes of the world to exceed this coinage, and complete the 100 crore.

The taste for wealth acquired by the king, became fatal to his subjects: to accumulate treasure he levied heavy exactions on all ranks of people, and particularly oppressed the brahmans, by resuming the endowments, which he or his predecessors had bestowed upon them: their complaints and remonstrances were unavailing with the king and his ministers, SIVA DASA and others, a set of *Cáyast'has*, incapable of any generous feelings, whose extortion drove a hundred brahmans of *Túlamúla* to drown themselves in the *Chandrabhágá:* to the supplications of the sacredotal order, the king shewing entire indifference, he at last attracted their menaces: these he ridiculed, but was finally punished for his impiety: in consequence of a curse denounced upon him by one of the order, he met with an accidental fall; a wound ensued in one of his legs, and this breeding a number of worms, which preyed upon the king's body, he died in the greatest agony, after a reign of thirty-one years.† LALITÁPÍRA, who succeeded JAYÁPÍRA was his son, by *Durgá Dévi;* he was a dissolute prince, who lavished his fa-

* These were copper *Dinars* it is to be supposed.

† The fate of this prince, as told with great exultation in the original, is a curious specimen of Brahminical arrogance and superstition: it is not without a parallel however in the writers of Europe, during the ascendancy of monkish authority; the conversation between the prince and priests, narrated in a somewhat dramatic form, is not without spirit: we may easily put it into dialogue.

A Brahman. MENU, MANDHÁTÁ, RÁMA, and other sovereigns, mighty as they were, treated with reverence and awe the Brahmanical order, whose resistless wrath consumes earth and its mountains, hell and its serpent brood, and even *Swerga* and its gods, and king.

The King. Here's a big mouth, that fed upon a beggar's crumbs, and drunk with pride, talks of its power with all the confidence of a holy seer.

Ittila, a Brahman. The revolutions of time have worked some change, but it is by submitting to a master, that we have ceased to be *Rishis.*

The King. Who art thou? VISWÁMITRA perhaps, or VASISHT'HA, or AGASTYA? I crave your pardon.

Ittila. And thou—thou art HARISCHANDRA, TRISANCU or NAHUSHA; if so, I am VISWÁMITRA, or who I please.

The King. By the anger of VISWÁMITRA, HARISCHANDRA was destroyed: what am I to dread from your mighty *indignation.*

ther's ill-gotten treasures on parasites and prostitutes, and instead of pandits and heroes, made buffoons and catamites his companions. He died after a reign of twelve years, of the grossest and lowest debauchery. A. D. 804

SANGRÁMÁPÍRA, his brother by another mother, the princess CALYÁNA DÉVÍ next ascended the throne: he was also known by the name of PRITHIVYÁPÍRA; he reigned seven years.* The next monarch of *Cashmir* was CHIPPATAJAYA, a son of LALITÁPÍRA, by a prostitute, named JÁYA DÉVÍ, otherwise CALYÁPÁLÍ, as the daughter of a *Calyapála* or distiller, of *Acha* village: the brothers of this woman had been brought to court by the king, and their nephew, being yet a minor, they took the government into their own hands: they were five in number, named PADMA, UTPALA, CALYÁŃA, MAMMA, and DHERMA, and their ambition opens a scene of domestic discord and calamity, to which we have yet been strangers in the history of *Cashmir*.

The uncles of the young king divided amongst themselves the places and profits of the government, and assumed the supreme authority in the kingdom: the power they thus enjoyed they were not disposed to relinquish, and when the young prince exhibited a disposition to assert his independance, they deposed and put him to death, having suffered him to enjoy a nominal reign of twelve years: as they were too jealous of each other to suffer the ascendancy of either, they found it expedient to raise another prince to the throne, and they elevated to the titular rank of king, TRIBHUVANÁPÍRA, also called AJITÁPÍRA,† the grandson of LALITÁDITYA, and son of an elder brother of

Ittila. (Rubbing his hand on the ground,) Lord of all time, at my just indignation, let the punishment due to the insulter of a Brahman, fall upon this prince.

The King. Let it fall; why does it delay! (The king's golden staff slips and he tumbles.)

The Brahman. Ha! Babbler, has it not fallen on thee!!

* My manuscript has seven; ABULFAZL has thirty-seven; which is an evident error as is shewn by the aggregate of the reigns of the Dynasty which he calls 257 years, 5 months, and 20 days; but which according to the addition of the several dates is 287—5. There being just the thirty years too much; the names in the translated Ay. Ac. here are written successively, *Lultanund, Sungramanund, Brisput.*

† *Ajeyanand.*—Ay. Ac.

the last monarch. Under the name of AJITÁPÍRA, the five usurpers continued for a period of thirty-six years,* to possess the real sovereignty of *Cashmir*, and they veiled their violence and injustice by a liberal distribution of the public treasures, and the foundation of splendid temples, and rich endowments. It was not likely that the brothers should always continue on friendly terms, and a dispute arose between MAMMA and UTPALA, which occasioned a furious battle† on the borders of the *Vitastá*. UTPALA, it should seem, was defeated and killed, chiefly through the valour of YAŚOVERMÁ, the son of MAMMA: the victor proceeded to dethrone and kill the king, his accession having been principally the work of UTPALA, and place ANANGÁPÍRA,‡ a son of SANGRÁMÁPÍRA, on the throne.

The principal actors in the turbulent period of the last reign, now disappear from the history, and are succeeded by their sons, without our being informed further of the fortunes of the usurping fraternity. The princes became mere pageants in the hands of these enterprising chiefs, with the unenviable distinction of being the first victims to the resentment of the conquerors. AJITÁPÍRA, we have seen, was put to death by the son of MAMMA: his successor was not more fortunate; as after a short reign of three years, he suffered a similar fate from the hands of SUC'HA VERMÁ, the now triumphant son of UTPALA. This chief, created king, the son of AJITÁPÍRA, the predecessor of the last monarch; his name was UTPALÁPÍRA,§ and he was to be the last of the *Carcota* dynasty, for SUC'HA VERMÁ being slain by a kinsman, his friends and followers, determined to place his son, AVANTI

* Reckoning, says our author, from the death of their nephew which happened in the year 89, startling us at once with a new computation, familiar of course to the Cashmirians, but to others requiring an explanation, which he has not given of it: the kind of date frequently recurs, and it is observable that it always stops short of 100, as if a cycle of 100 years had been adopted in *Cashmir:* sometimes, as in the present instance, the date nearly corresponds with the odd years of the centuries of the *Hijra*, but the approximation is not always near enough to make it probable that reference to the *Hijra* is intended.

† It has been narrated, according to CALHANA, by *Sancaca*, a poet, in a poem named *Bhuvanabhyudaya*.

‡ *Anunkanund.*—Ay. Ac. § *Atbalanund.*—Ay. Ac.

VERMÁ on the throne. UTPALÁPÍRÁ was accordingly deposed, and the son of SUC'HA VERMÁ, the founder of the UTPALA* dynasty, succeeded.

SECTION III.

THE accession of AVANTI VERMÁ† was not suffered to take place without opposition, and he had to undergo many conflicts with his own cousins, and even with his brothers, before his dominion was established. By his valour and prudence, however, aided by the sage counsel of SURA the minister, to whom he was chiefly indebted for his crown, he overcame all opposition, and remained the undisputed sovereign of *Cashmir*. A. D. 876

Having restored order and tranquillity, the king nominated SURAVERMÁ his brother by a different mother, *Yuvarája*, and the two brothers were both distinguished for their liberal and public spirit: the king gave large presents to the Brahmans, and the *Yuvarája* bestowed upon them the *Agraháras*, *K'haduya* and *Hastikerna*, constructing a temple and statue of *Gocula*. Their example was followed by the younger brothers, and the ministers of the two princes, and a variety of towns, temples and images embellished the kingdom. Amongst these we may specify the following; *Avantipura*, a city founded by the king at *Viswakéswara Cshétra*, in which he also erected a temple to AVANTÍŚWAR, or SIVA, whose worship he had now adopted, in place of the *Vaishnava* tenets in which he had been educated. He also erected

* His grand-father: it is difficult here to keep the narrative clear, amidst the rapid succession of so many uncommon names. The deposition of *Utpálapíra* happened, according to the author of the *Wakiat-i-Cashmir*, in the year of the *Hijra* 209; he is not quite right in his computation, as agreeably to our author's series of dates it must be placed about A. D. 862. It may be here observed that *Abulfazl* has altered what may be called the family designation of most of the *Carcota* princes, and has changed the terminating name *Apira* to *Ananda*. In the next list we have another change but that is a mere misreading, the family name *Vermá* is converted into *Derma* the *Vau* ؛ and *Dal* ؛ being easily mistaken for each other. VERMÁ is an adjunct expressing a *Cshetriya* or military descent; the present possessors however seem to have assumed it, as the founder of the family, UTPALA, and his brothers were apparently of a less respectable origin.

† *Aduntderma.—Abulfazl.*

here three statues of the same deity, under the names of TRIPURÉŚWARA, BHUTÉŚA and VIJAYÉŚA, with bathing vessels and stools of silver.

Surapur, a city founded by the minister; also a temple of the associated *Sivas*, and a college for Ascetics at *Suréśwarí cshétra*. His son also established a *Mat'ha*, and his wife built the temple of *Sada Siva* at *Surapur*, a city which has since changed its name to *Dhacca*.*

The minister who was thus the founder of cities, was also a munificent patron of the learned, and the names of MUCTACÁNA, SIVA SWÁMÍ, ANANDA-VERDHANA, RETNÁCARA and RAMAJA are enumerated as illustrious objects of his patronage.†

The reign of AVANTIVERMÁ was rendered remarkable by a severe famine, occasioned it is said by the rivers deserting their customary beds, and deluging the surrounding country, destroying the crops and submerging from time to time whole villages: the dearth was so excessive that many perished, amongst whom were *Callatta Bhatta*, and other eminent men. A khari‡ of grain sold for a thousand and fifty dinars.

This impoverished state of the country continued for ten years, till SUJJYA remedied the evil: the birth of this person was regarded as mysterious; he was found exposed in an earthen vessel by a *Chandáli*, by whom he was suckled and brought up: hearing the causes of the irregular swelling of the river discussed, he expressed his conviction that he could apply a remedy, and his words having been reported to the king, he was brought before AVANTIVERMÁ. The mode, he proposed to adopt, he declined explaining,

* Not the modern Dhacca of course. There is a place so called in *Cashmir* upon the Jelum, south-west of *Bijore*. At present indeed it is scarcely within the limits of the province, and must be comprised in the states, said in Elphinstone's map, to be subject to independant Rajas, immediately south of Cashmir.

† They are names however not now known. ‡ The Khari is equal to two bushels, two pecks, one gallon and two-thirds (A. R. v. 98,) or about the third of a quarter. The *Dinars*, it may be suspected were of copper.

and he was looked upon by the ministers as an idiot or a cheat: the king notwithstanding determined to give him a trial, and allowed him at his request to take from the treasury several bags of *Dinars:* with these in his possession, SUJJYA retired to the site of a village named *Anandaca*, where, getting into a boat, he advanced into the water: when in the centre of the pool he threw into it a bag of *Dinars*, and he repeated this wherever the water was collected: the villagers tempted by the hope of obtaining the money, combined to effect its recovery: they first blocked up with large stones, the channel of the *Vitastá* where it issues from the mountains, the banks being there contiguous: they then drained the country of the accumulated water, by cleaning the canals and outlets, through which it was accustomed to run: the passages being cleared by this contrivance, the dyke was broken down, and the *Vitastá* rushing forth with an impetus, proportioned to the obstruction it had encountered for several days, hurried away every obstacle, and flowed in a rapid and fertilising torrent through its old, and through many new channels, to its junction with the *Sindhu.** These two streams formerly met near the temple of *Vainya Swámí*, but they now unite, observes our author, between that place and *Vishnuswámí* or the towns of *Parihásapur* and *Phalapur*† and he adds, that some old trees existed in his time, bearing the marks of the ropes which the *Nishádas*‡ had fastened there. Having collected massive stones to confine the *Vitastá*, SUJJYA constructed the *Mahapadma Saras;* springing from which receptacle, the *Vitastá* darts forward with the rapidity of an arrow from a bow.§

SUJJYA was not contented with remedying the evil: he also provided

* This cannot be the *Indus*, but must be the *Sind* river, which has its source in great Tibet.—*Ay. Ac.* ii. 158. It is not improbably a branch however of the Indus.

† The last must be *Shehabedinpur* where the Behut and Sind unite their streams.—*Ay. Ac.* ii. 158.

‡ The low casts of villagers, he means, it may be supposed, and the ropes may have been part of a *Jhula* or swinging bridge.

§ This should be the reservoir or bason at *Vira Nag* noticed by *Forster*, ii. 4, and, according to the report which he repeats, constructed by *Jahangir:* this is an evident error however, as the same bason is thus mentioned by *Abulfazl:* "at *Weersir* is the source of the river Behut, with a bason measuring a *jereeb*, whence the water rushes out with an astonishing noise. The spring is called *Wirnag;* it has a stone border and on the east side are temples."—*Ay. Ac.* ii. 155.

against its recurrence, by the construction of dykes and canals, by which without fear of a deluge, the waters were distributed equally and plentifully to all parts of the kingdom; such was the beneficial result of his measures, that a *khari* of grain, which before the late dearth, sold for 200 *Dinars* has ever since been restricted to no more than thirty-six.* SUJJYA was bountifully rewarded for his labors, and was enabled to perpetuate his name by founding *Sujjyapur* on the banks of the *Vitastá*, where it issues from the reservoir.

After enabling the ingenuity of SUJJYA to execute the beneficial arrangements above described, and witnessing the improving condition of his kingdom, AVANTIVERMÁ being taken ill, determined to end his days at *Tripura Cshétra*, and accordingly proceeded thither, where he resumed the *Vaishnava* faith, and listening to the perusal of the *Bhágavat Gitá*, he terminated his career in the year 59, after a reign of 28 years and 3 months.

A. D. 905 As AVANTIVERMÁ was not succeeded by his brother, and not only a new king, but a new *Yuvarája* was appointed upon his death, we are left to conclude, either that SURA VERMÁ was dead, or the office of *Yuvarája* conferred no title to the succession, and was held at pleasure: it appears too, that at this time, the great officers of the state continued to exercise the authoritative interference they had obtained under the last dynasty, and disposed at will of the functions of royalty. It is said accordingly that the son of AVANTIVERMÁ, SANCARAVERMÁ† was made king, by the power of the chamberlain RETNAVERDHANA, whilst KERNAPA, sprung from one of the late king's brothers, procured the nomination of SUC'HA VERMÁ, the son of SURAVERMÁ, to succeed his father in the *Yauvarájya*, in opposition to the chamberlain and the king, a circumstance which led to a civil war between

* This confirms what I have hinted that these *Dinars* were copper. The *Khari* is probably *Abulfazl's. Kherwar* in which he says every thing is estimated in *Cashmir*: the average price of this, ascertained when fixing the revenue of the province, turned out to be twenty-nine dams or pyce.—*Ay. Ac.* ii. 161.

† *Sunkerderma.—Abulfazl.*

the superior and subordinate princes. In the contest, many distinguished chieftains were slain, as ŚIVASACTI and others, but the king, with the aid of SAMARA VERMÁ, and other leaders of note, finally prevailed, and established his authority in the kingdom.

Having thus secured himself at home, he directed his views to foreign conquest, and being joined by the king of *Darvábhisára* and other princes, he led into the plains an army said to consist of nine lacs of foot, one of horse, and three hundred elephants: he first subdued PRITHIVÍ CHANDRA king of *Traigerta*,* who having left his son in his capital, advanced to do him homage, but upon beholding the immense host collected by the king, he was alarmed for his personal safety, and suddenly made his escape. ŚANCARA VERMÁ then rooted up the power of *Alak'hána*† king of *Gurjara*, seizing his treasures, and kingdom, and leaving him only *Tacca Désa*. He entirely subverted the universal supremacy which had been seized by BHOJA,‡ and made himself formidable to his neighbours on either side of him, the kings of *Darat* and *Turushca*,§ placed between them like *Áryaverta* between the *Himalaya* and *Vindhya* mountains: on his return to *Cashmir* he founded in *Panchasatra*, a city named after himself: it was constructed chiefly of materials furnished by the ruins of *Parihásapur*, and was distinguished by a temple dedicated to *Siva* as *Sancara Gaurísa*, and *Sugandhésa*, the latter named after the queen SUGANDHÁ, the daughter of the king of the North.

The disposition of ŚANCARA VERMÁ to accumulate wealth, degenerated

* Part of Lahore.

† This is a strange name: it should be that of a Musselman but the Musselman princes could not have been then established in *Guzerat*. There is however a *Guzerat* in the *Punjab*, to which the *Mohammedans* were beginning to extend themselves, and which may be the state intended.

‡ Not in his life time it may be supposed, but ŚANCARA VERMÁ flourished about half a century earlier than has hitherto been assigned as BHOJA's date.

§ We still have the *Durds* north-west of *Cashmir*; the Turushcas should be therefore to the south-east, and they were the Ghiznian Governors, probably, then dependant on the *Samanian* princes of Bokhara; the simile is applicable to such a position.

into the most insatiable avarice, and subjected his people to every kind of extortion: he levied heavy tolls and taxes, exacted undue proportions of the produce of land, and let out to farm those lands which were the property of the temples: he cheated his cultivators in the weight of the seed corn, and expected a full return, and he seems to have established a monopoly of sandal, incense, oil, and many other articles of trade: his chief instruments in these oppressions were the *Cayast'has*, and especially one named LAVATA, who received from the king a stipend of 3000 *Dinars*, whilst BHALLATA and other eminent poets about the court, were kept without any pay: the chief minister represented the harshness of his commands in vain to the monarch; to his son who had expatiated to him on the afflictions of his people, he replied by desiring him to wait till he was king, when he might, if he pleased, relieve them, and he was equally insensible to the lesson he might have learnt from the neighbouring country of *Darvábhisara*, the king of which, with all his sons, had been lately killed in a popular commotion, occasioned by his oppressive government.

ŚANCARA VERMÁ possibly thought he should divert the attention of his subjects to less unpopular occurrences, by engaging them in military expeditions; for he is said now to have led an army to the north,* where he subdued the people along the *Indus*,† and entered the *Urasa* country, where he was shot in the neck with an arrow by a mountaineer; he was immediately put into a litter, and his death, which took place shortly afterwards, concealed from the troops, who were immediately marched back to *Cashmir*

* *Bedia-ad-din* says, against the Mohammedans of *Khorasan*; the followers of Islam having according to him spread their empire even to the Punjab in the preceding reign.

† The *Sindhu*, here the large river, as the other or smaller was already in his possession; the invasion took place into little *Thibet*, but the invaders could not have proceeded far, as they reached on their return the frontiers of *Cashmir* in six days. Who the *Aurasas*, the people of *Urasa*, were, is not easily conjectured: they could scarcely have been the Russians, called in the east *Urus*, whose power at this period, was first making its appearance in a different direction, and it is only in the absence of more satisfactory illustration, that I venture to suggest a connexion, between this word and the Ooloos, the hordes of the Tatars, and clans of the Afghans: the derivative name, applied to the people, is in favor of the conjecture, as it means children, whom the Hindoos consider legitimate, being born of a man and woman of the same cast or tribe.

with all possible expedition; they reached *Holyásaca*, a place on the frontier, in six days, where, being now out of danger, they halted to perform the funeral obsequies of the monarch: he was consumed on a stately pile: three of his queens, a pandit, named JAYA SINHA, and two of his servants, burning themselves with the body.*

The son and successor of the last king, GOPÁLA VERMÁ, being yet an infant, was placed under the tutelage of his mother SUGANDHÁ: she became regent during his minority, and her ascendancy involved the country in a series of intestine disorders, as she seems to have been a woman of a weak, if not vicious character; the minister and chief treasurer PRABHÁCARA DÉVA was her favorite, and engrossed the whole power of the state. This man made CAMALACA, also named *Sahi*, Governor of *Bháńdapur*, but he proving disobedient, it was taken from him, not without a conflict apparently, and given to TORÁMÁNA, the son of LALITA. A. D. 913.

The reign of GOPÁLA was short; he was carried off by magical incantations, it is said, by the contrivance apparently of PRABHÁCARA, who was afraid of being called to account for the great deficiencies in the public treasury, which were ascribable to his own peculations; RÁMA DÉVA, the person employed by him, afterwards confessed the fact, and as the minister disappears from the history, we may suppose he paid the penalty of his crime. SUGANDHÁ, in the midst of her faults, appearing to entertain no ambitious views for herself, and to have cherished the memory of her son.

A brother of GOPÁLA succeeded him, but he expired after the short term

* These accompaniments of his cremation find an analogy in many parts of the south of India, as noticed by early travellers; they are not however directed by the *Sastras*, any more than the self-immolation on account of sorrow or sickness, of which we have had several instances; the latter indeed in the present age is prohibited at any place except *Prayaga*. Several instances of suicide occur in the Hindu books, as *Bhishma* in the *Mahabhárata*, and the father and the mother of the young ascetic killed accidently by *Dasaratha*, who mounted the funeral pile with their son, as told in the *Raghuvansa*, see A. R. x. These cases however are referred to former periods.

of ten days; and as with him the race of ŚANCARA VERMÁ ended, the kingdom was now without a legal occupant: SUGANDHÁ seated herself on the throne, but either at her own desire, or compelled by the military leaders of the kingdom, she soon made way for another prince.

In this stage of *Cashmirian* history we are introduced rather abruptly to some new actors in the scene, who continued for a long period to influence very materially the disposal of the crown: they are of a military character evidently; it is only doubtful, whether they were part of the native forces, or whether they were mercenary bands of foreign adventurers. They are denominated *Tatris* and *Ecángas*, and it is perhaps not straining probability overmuch, to conjecture that our author intends these words to represent what we should write *Tatars* and *Afghans;* men, who at all times have sold their services to the princes of India, and have not unfrequently become the masters of those whom they originally obeyed.*

Whatever may have been her inducements, SUGANDHÁ, after holding the reins of government for two years, recommended to the ministers and officers to chuse as king NIRJITA VERMÁ the grand-son of SURA VERMÁ: it was objected to him however that he was a cripple, and therefore not fit to rule, but as his family descent was highly respectable, the chiefs determin-

* The word *Tatar*, for *Tatri*, is an obvious conjecture: *Ecánga* for *Afghan*, is not so satisfactory. *Eca* means one, and *Anga* limb or body figuratively as well as literally, and *Ecánga* may refer to some peculiarity of discipline, as to troops, fighting in a body. The origin of the word *Afghan*, says *Elphinstone*, is entirely uncertain, but it is probably modern: it is known to the Afghans themselves only through the medium of the Persian language; it has no meaning however in Persian, and they therefore probably borrowed it from some other quarter transmuting it in their ordinary manner: there is some probability therefore about the Etymology suggested: the Afghans it is asserted inhabited the mountains of *Ghor* at a very remote period, and seem to have been established in the north eastern mountains of *Afghanistan* in the ninth century, (*Elphinstone's Cabul*, 167,) expelling thence, probably about that time, the *Dámaras*, who from our history appear to have occupied, till the ninth century, that part of the vicinity of *Cashmir:* the mercenary character of the *Tatris* is repeatedly alluded to: they are said to have been attracted into the country by the *Hundicas* of the king of *Canouj*, and they are compared in one place to prostitutes who saw no merit in a man but his money.

ed to nominate his son, and PÁRT'HA* was accordingly crowned king of *Cashmir*.

At the end of ten years, the leaders of the *Ecángas* dissatisfied with the prince, and jealous of the greater share which the *Tatri* foot had in his nomination, determined to replace SUGANDHÁ in the government: they accordingly proceeded to her residence at *Hushcapur*, and placing her at their head returned to the capital: they were met by the *Tatris* in the pay of the king, and after a severe conflict were totally routed: the queen was taken prisoner and put to death at *Nishpalacaluhar*.

The victorious troops now considered the kingdom at their disposal, and yielded reluctant obedience to their prince for a further period of five years; at last their insubordination broke out with ungovernable force, and their avarice, which was insatiable, led them to accept the offers of the father of PÁRT'HA, and to place the cripple on the throne. The revolution was facilitated by a period of general distress, occasioned by a famine, consequent upon the unseasonable inclemency of the weather.

The reign of this prince lasted but one year: his throne and life were assailed by various enemies; his son PÁRT'HA was endeavouring to recover his supremacy; his ministers ŚANCARA VERDHANA and SUGANDHÁDITYA were plotting for their own accession, and his queen was engaged in a criminal intercourse with the latter, and prepared to commit any atrocity to secure the undisturbed gratification of her libidinous passion: it is not at all extraordinary therefore, that he should have been crowned one year, and deposed and slain the next.

The successor of the cripple was an infant son, named CHACRA VERMÁ who under the protection of his maternal grand-father, enjoyed the sovereignty ten years: at the expiration of this time however, the sons of MERU VERDHA- A. D. 913 C. Y. 97

* *Bareth.—Ay. Ac.*

NA, the elder of whom, ŚANCARA VERDHANA, was minister to the late king, set up another of his sons, SURA VERMÁ, and expelled the reigning prince: a most turbulent period now ensues, and the several princes rise and fall, sometimes repeatedly, in rapid succession.

A. D. 953–9
C. Y. 7.

SURA VERMÁ, after a nominal reign of one year, was deposed by the discontented *Tatri* troops, and PÁRT'HA again crowned king; he soon made way for CHACRA VERMÁ, once more, whose bribes had won these venal soldiers to his interest: unable however to satisfy their repeated demands, he was obliged to abdicate, and seek safety in flight, whilst ŚANCARA VERDHANA endeavoured to effect a purchase of the crown from the mercenary troops; in this he was foiled; his embassador to them, his own brother SAMBHU VERDHANA, making the bargain for himself, and being elevated by them to the throne: a measure however that appears to have contributed to check, if it did not annihilate the power, of the pretorian *Tatris*.

CHACRA VERMÁ in his flight had found an asylum near *Dhacca*,* at the house of a *Dámara*, and one it may be presumed who was possessed of powerful influence with the mountain tribes: induced by the liberal promises of the king, and his reiterated assurances of eternal gratitude, he collected a considerable number of his countrymen, and advanced with CHACRA VERMÁ once more towards the capital.

The entrance of the king into *Srinagar* was effected without opposition: indignant at the fraud practised on him by his brother, ŚANCARA VERDHANA had assembled an army, and advanced from *Maruwa*,† where he was stationed at the period of his negotiation for the crown: to maintain the

* See the note on *Surapur*, the city itself must have been in the quarter of Cashmir peopled by the *Dámaras*.

† Any dry or desart soil, of which we have several extensive tracts to the south-west of Cashmir.

kingdom, SAMBHU VERDHANA had marched to oppose him with the troops in his interest, and the capital of *Cashmir*, being thus left without defenders, fell an easy prey to the invader: the approach of CHACRA VERMÁ appears to have reunited the two brothers, as we find them both present in a furious conflict fought near *Padmapur* between their forces, and the *Dámaras* under CHACRA VERMÁ, in which the latter obtained a most decisive victory: five or six thousand of the *Tatris* were slain, ŚANCARA VERDHANA graced the bed of heroes, and SAMBHU VERDHANA attempting to reassemble the scattered fugitives of his army, was shortly afterwards taken prisoner and put to death: the power of the *Tatris* appears to have been completely broken by their defeat, as although mention of them does recur in the course of the history, no important part in the revolutions of the crown, is henceforward assigned to them.

CHACRA VERMÁ returned to the capital in triumph: mounted on a superb charger, in the centre of his victorious cavalry, holding in his left hand his helmet, and touching his turban in courtesy to the crowd with his right, he entered the city, amidst the clamour of kettle drums and the shouts of the multitude; he soon however forfeited his popularity; being fascinated by the attractions of two daughters of a *Dombha** who, as public singers, appeared before the king, he took them into his haram, and devoted his whole time to their impure society; the consequences were obvious; he incurred the reprehension of the wise and respectable, and what was of more importance to him, by promoting the low connexions of his favorites, above his former ministers of the military and sacerdotal orders, he roused their indignation and resentment.

Amongst those who felt aggrieved by the preference thus shewn to an out-cast tribe, the *Dámaras* were particularly distinguished. They who had been the chief instruments of the king's triumph, were now neglected with the rest of his adherents, and compelled to make way for those, whose birth and services gave them no claim to pre-eminence. They felt the neglect of

* A man of the lowest class, by whom all impure offices are performed.

the king the more severely, as contrasted with his past assurances of favor, and they determined to make him suffer the effects of their vindictive spirit: a party of them accordingly contrived to gain by night, admission into the palace, and falling upon the king, in the apartment of his favorite mistress, unarmed and unprepared, they easily sacrificed him to their fury: he was slain after a reign of nearly fourteen years, interrupted from time to time, by the temporary rule of his occasionally successful competitors.

Unmatti Varti, a son of Párt'ha, was now placed upon the throne, in preference to his father, who was still alive; his claims to this election cannot be easily conceived, especially, as in the grovelling tastes of this prince, as well as in ferocity of temper, he exceeded all who reigned before or after his time; his associates were dancers, singers, and buffoons; his favorite pastime, fighting birds or beasts, in which Párvagupta, by his superior skill, was his principal minister and friend; notwithstanding which, he engaged in treasonable designs, aided by Bhubhaṕṕa, Servata, Saja, Cumuda and Amritácara: these individuals divided amongst themselves the chief offices of profit and power, whilst Raccasa, a *Dámara*, commanded the army. By the advice of these miscreants, and the suggestion of his own sanguinary disposition, the king commanded a general slaughter to be made of all whom he thought he had occasion to hate or fear, and did not spare the members of his own family; his brothers he shut up in a dungeon, and starved to death, and his own father was dragged from his retirement, and murdered by order of this unnatural son: his barbarity did not stop there, he went to view his father's corpse, and made the murderers shew the wounds, that each had inflicted: they hesitated to do this in the king's presence, when Párvagupta, to reprove the backwardness of one of them, his own son, Dévagupta, struck his dagger into the lifeless body, to the great mirth and satisfaction, it is said, of the king: in further proof of this prince's atrocious character it is related that upon its becoming necessary to oppose the *Dámaras*, who pillaged the country with impunity, the king used to amuse himself with cutting off the heads of his attendants and subjects and the breasts of the women, in order to try the temper of his sword, and perfect himself, he said,

in the use of his weapons. Death put a stop to his ferocious practices, and released *Cashmir* from his tyranny, after it had endured it little more than two years.

The son of the Parricide, SURA VERMA* succeeded him: he was yet an infant, under the management of his mother, and his nominal reign was of short duration. CAMALA VERDHANA, who had been employed to clear the country of the *Dámaras*, had succeeded in the undertaking, and had made peace and alliance with the chiefs of *Campana* and *Marawa*. He now returned accompanied by all the leaders, and the *Tatris* and *Ecángas*, and displayed all the pomp of royalty, although he had not assumed the name of king: doubtful of his purpose, and deserted by all her late adherents, the queen fled with her infant, unattended, into the forests.

CAMALA VERDHANA although now in possession of the military power, and consequently of the kingdom, hesitated to mount the throne: a piece of folly our author observes, only ascribable to the treacherous counsels of unfaithful ministers or to the adumbration of his intellect, as a punishment of evil done in a former life. His moderation did not proceed from indifference to royalty, as he collected the brahmans, and desiring them to nominate a king, attempted to win them over to his interests. The opportunity was lost; the brahmans desirous of selecting a suitable person, or instigated by other motives, deliberated for some time about the choice, and dispatched emissaries to ascertain the merits and claims of various candidates.

Amongst others, the widow of UNMATTIVERTI sent messengers to the brahmans to solicit their support of her son. On their road, they were encountered by a youth, who was just returning to his own country, and who accompanied them to the capital, where the brahmans, unable to re-

* Abulfazl confounds this with the former prince of the same name.

sist what our author thinks the impulse of destiny, proclaimed him, as soon as they beheld him, sovereign of Cashmir.

The person thus suddenly elevated to the throne was YASASCARA DÉVA: he was the son of CÁMADÉVA, born of *Viradéva*, an inhabitant of the village of *Pisáchapur*. CÁMADÉVA in his youth had been brought up by MÉRUVERDHANA, and being a lad of abilities, rose with the patronage of that minister to the *Ganjádhicarya*, the command of the guards, which he held under the reign of ŚANCARA VERMÁ. Having occasion to dread the hostility of PRABHÁCARA, the favourite of SUGANDHA, he determined to place his son out of danger, and sent him into another country with a young friend named P'HALGUNA. They had resided abroad for some time: at length his father being dead, and propitious dreams exciting his hopes, *Yasaścara* resolved to return to his native country, and it was upon this occasion that he encountered the agents of the queen, and learning from them the object of their journey, accompanied them to the capital, where he so unaccountably gained the unsolicited choice of the sacerdotal electors.

A. D. 961. The vigour and equity of the new king fully justified his election; he re-established order and security, and gave to *Cashmir* a period of repose which had been long unknown: theft and murder were abolished; the roads were perfectly safe, and the shops were left open throughout the night without a guard; the distinction of classes was rigidly maintained, and the *Chandalas* no longer administered the affairs of state, nor did the Brahmans carry arms; we have several anecdotes of this king's acumen and justice: one of them is narrated by *Abulfazl*, a reference to whom will perhaps be sufficient to satisfy any curiosity that may be excited on this head.

After promoting the happiness of his subjects for several years, YASASCARA was doomed to suffer the loss of his own: one of his wives was detected in an intrigue with a watchman of the palace, a man of low cast, and it appears that the king was more afflicted by this latter circumstance, than any thing else, as it had prophaned the purity of his birth; to expi-

ate the stain thus contracted, he made liberal donations to the *Brahmans*, and founded a *Mat'ha*, but continuing to dwell upon his disgrace, his health became affected, and he retired to the college of his own foundation to expire.

Before leaving the palace, the king directed the nobles and leaders to elect as his successor, his kinsman VERNÁTA, the son of RÁMADÉVA, passing over his own son SANGRÁMADÉVA, of whose legitimacy he entertained some doubts : the arrangement thus made was far from agreeable to the men in power, for VERNÁTA was a prince in the vigour of life, whilst SANGRÁMADÉVA was an infant, during whose feeble administration they flattered themselves they should be able to appropriate the wealth and influence of the government to themselves and their adherents : by their intrigues, therefore, VERNÁTA was thrown into prison, and although he appears to have escaped at the time, he shortly afterwards fell a victim to the jealousy and ambition of the strongest party, by whom SANGRÁMADÉVA was established in the government.

The old king lingered some time after he had made the fruitless disposition of the succession, but he was surrounded by the creatures of the intriguers, and there is reason to suppose that they accelerated his death by poison ; PÁRVAGUPTA and his partizans had now obtained what was still but a secondary object of their ambition, and their past success encouraged them to elevate their views to royalty itself: the seasons befriended their designs, and the discontent of the people occasioned by the pressure of a general scarcity, afforded them a ready instrument for effecting their purpose: an insurrection was speedily excited: a tumultuary mob, chiefly composed of the military, and headed by PÁRVAGUPTA and his confederates, attacked the palace; they slew RÁMA VERDHANA, the chief minister, who had attempted in vain to defend it, and penetrated to the presence of the king Seizing his person they bound him with fetters of flowers, drag-

ged him to another apartment, and put him to death ; after which, they tied a stone to his neck, and threw the body into the *Vitastá.* PÁRVAGUPTA then in complete armour, and with his sword drawn, seated himself on the throne, and received the homage of his accomplices and of the terrified citizens.

After a short reign of little more than a year, this prince suffered the fate due to his crimes ; he was slain by a party of enemies at *Suréswarí Cshétra* and left the crown to his son.

CSHÉMAGUPTA was a prince of depraved habits, and spent his time in low and sensual indulgence; wine and women occupied his whole attention, and profligate characters engrossed his company; it was not at all extraordinary therefore that the kingdom should become a prey to civil dissension and foreign inroad, as the affairs of state were entirely neglected, and the ministers alone fit to conduct them, were obliged to abandon the court in order to avoid the ridicule and abuse, or even personal contumely which they were compelled to receive from the prince and the companions of his revels : consequently, besides private hostilities between P'HALGUNA, and some of the king's friends, the ruler of *Campana* engaging in a contest with the *Dámaras,* burnt and destroyed the *Vihar* of *Jayéndra,* and demolished a brass image of *Sugata,* and the king of the *C'hasas* compelled CSHÉMAGUPTA to cede to him six and thirty villages, after burning many *Vihars.**

The ruler of Lahore, SINHA RAJA, now gave CSHÉMAGUPTA in marriage his daughter DIDDÁ, the grand-daughter by the mother's side of *Sahi ;* a princess destined to bear an important part in the subsequent revolutions of *Cashmir :* her charms seem to have had little effect upon her husband, for after his marriage he adopted a new amusement, and devoted all his time to the pleasures of the chace. They were the occasion of his death, for

* These broils which are very obscurely and confusedly narrated in the original, were perhaps of a religious complexion, and may be connected with the persecution of the *Bouddhas,* of which so much is said and so little is known, by the *Hindus.*

having pursued a jackall for a considerable distance, and urged the beast to the pains of death, the prince observed flame issuing from the mouth of the animal as it expired; struck with alarm at this portent, he was instantly seized with a fit of trembling which terminated in the *Lutamaya** fever, a fever that is invariably fatal : he was carried to *Cshéma Mat'ha* near *Hushcapur*, where he died, after a reign of eight years and six months.

Abhimanyu, the son of Cshémagupta, succeeded his father; at first his early age, and afterwards his tranquil temper, left the reins of administration in the hands of his mother, whose defective character was far from equal to the task, and whose supremacy introduces us consequently to a scene of unprecedented tumult and disorder.

The queen's first impulse was to burn herself with her husband, from no better motive the Hindu writer admits, than the pride of birth, and fear of P'halguna, the late king's minister, and father-in-law, by another of the monarch's wives, and who on that account had always been hostile to Diddá: she was also embarrassed at the outset of her career, by a conflagration of a most alarming nature, which broke out at the fair of *Tungímara*, and extended to *Vitala Sutrapátá*, consuming an immense number of villages, and many large palaces and temples. This added to the dread of P'halguna, now all powerful, would certainly have given her a claim to the honors of a *Sati*, had she not been dissuaded from it by Naraváhana, a man of great merit and fidelity, attached to her service. The return of one of the king's sons, Kerdama, contributed also to the consolidation of her authority : he had been to the *Ganges* with the bones of Cshémagupta, attended by a select body of troops, and as he was no friend to the usurping P'halguna, that minister thought it politic to come to an accommodation with the queen, and upon the reconciliation taking place, he withdrew for a season from public affairs.

* We have here two strange subjects; in the superstitious idea of flames issuing from the jackall's mouth, and the nature of the *Lutamaya* disease : the first is common; it is the current belief in India that any animal urged to death by a chace emits flames from his mouth before he expires.

The next opponent of the regent's authority, and she appears to have encountered opposition in rapid succession, were MAHIMÁN and PATALA, the sons of SUJA and BHUBHAṬṬA, two of PÁRVAGUPTA's friends and co-adjutors: these youths had been brought up in the palace, but jointly resenting some personal affronts offered by the queen regent to MAHIMÁN, they plotted a conspiracy for his elevation to the throne. In this they were joined by several of the leading men of *Parihásapur*, and *Lalitapur* and succeeded in levying a respectable force, and leading it against the *Ráni* DIDDÁ, with the assistance of NARAVÁHANA, prepared to engage them, but unwilling to trust the decision to the chance of war, she engaged by large presents, the Brahmans of *Lalitapur* to come forward as mediators: their mediation was irresistible, and MAHIMÁN and his confederates were compelled, although reluctantly, to abandon their design, and submit to the forgiveness of the queen : a curious proof of the influence of the sacerdotal order in *Cashmir* in comparatively modern times.

One of the chief leaders of the late conspiracy was YASODHARA, to whom the queen gave the government of *Campana*, to bind him more firmly to her interests: a war now arose between him and *Sáhi*, governor or king of *Dhacca*, and the latter was defeated, and compelled to pay tribute : proud of his success, and instigated by evil counsellors, YASODHARA soon found cause of complaint against the regent, and led his army against her, supported by NARAVÁHANA. The regent resolved to encounter him in the field, and a battle accordingly ensued, in which YASODHARA was defeated: he was taken prisoner, and thrown into confinement with all his family, whilst many of his adherents, also captives, were thrown into the *Vitastá*, with large stones fastened to their necks.

It would be useless to prosecute the story of civil discord further : the nobles and governors had in fact all become more or less independant of a monarchy, long feebly administered, and were ready on every slight pretext to lead their military followers to the field. By the counsels and conduct of NARAVÁHANA, the regent uniformly triumphed, and appears to have

deserved the success she enjoyed: his death however was the ruin of her credit, if not of her power, and she appears hereafter in the character only of a cruel, libidinous, and ambitious woman.

At this period ABHIMANYU died, our author says of a consumption: *Mohammed Azim* asserts that he was poisoned by his mother. The former account, however, is most trust-worthy, especially as corroborated by the sequel, which represents her as engaged for a year afterwards, in laying the foundations of cities, and pious and public edifices, in order to dispel her grief. In this way she is said to have founded *Cancanapur* and *Diddapur Mat'has*, for the *Saura* and *Láta* Brahmans, and the temples of *Abhimanyu Swámi* and *Didda Swámi*; several *Chatur Sálas* or *Serais*, and many *Vihárs*, and to have made the conflux of the *Sindh* and *Vitastá* a place of great sanctity. At the end of twelve months, however, her ambition revived, and upon reassuming the administration she thought it advisable to rid herself of her grandson NANDIGUPTA, who had succeeded his father, and whom she put to death.

TRIBHUVANA, another grandson, was next placed upon the throne, but speedily shared the fate of his brother, and a third named BHÍMAGUPTA was elevated to the dangerous distinction. DIDDÁ now chose a new favorite, and a *C'hasa* named TUNGA, originally a keeper of buffaloes, and subsequently a courier in the service of the minister, enjoyed her affection and favours. He soon acquired the ascendancy at court, and thrust himself and his five brothers into all the most important posts. The intrusion of this upstart race, was warmly resented by the Cashmirian nobles, who called to their assistance VIGRAHA VÁGA, a nephew of the queen's, and a man of high spirit and great power: TUNGA was obliged to resign his newly acquired authority, and preserved his life only by the interference of the Brahmans, whom the bribes of the queen had induced to intercede. VIGRAHA, finding it impracticable therefore to afford that redress to the Cashmirians which they had solicited, retired to his own territory, and left the ascendancy to be recovered by the favorite of the queen, who notwithstand-

ing his low origin, appears to have been a man of firmness and activity. The young prince BHÍMAGUPTA betraying, as he advanced in years, some indications of an independent spirit, was now removed from the throne, and privately put to death. KERDAMA RÁJÁ and several of the leading men, suffered the same fate, and the Brahmans who had saved the life of TUNGA were thrown by him into prison, probably to compel them to refund the reward of their late mediation. Seriously alarmed for their safety, the nobles now called to their aid the Prince PRITHIVIPÁLA, who marched with his troops to their aid, and occupied the capital. TUNGA, however, foiled his adversaries : advancing upon the city with a large force, he set the suburbs on fire, and cutting off the retreat of the enemy, effected the destruction of a great part of their army. PRITHIVIPÁLA* was compelled to submit to TUNGA, and to purchase his safety by engaging to pay tribute to the sovereign of Çashmir

The transaction thus described, is the last instance of civil dissension that seems to have occurred under the reign of DIDDÁ RÁNÍ : triumphant over both foreign and domestic foes, she was now at leisure to regulate the succession to the kingdom, and adopted SANGRÁMADÉVA, the son of her brother UDAYA RÁJÁ, as her associate in the government, and as the future supreme ruler of *Cashmir*. This was the last act of her life, and is
A. D. 1025. the last event recorded by our author, whose history closes with the death of DIDDÁ RÁNÍ, and accession of SANGRÁMADÉVA in the 79th year of the
C. Y. 79. *Cashmirian* cycle, or the year of our Lord 1025, and after the queen had held the sole sovereignty of the country for three and twenty years.

* The territory governed by this prince is not named : he might in fact have not yet been in possession of any, as the son only of the sovereign of *Lahore*, *Anandapala*, whose successor about the date of the above events, is named by *Ferishta*, *Pitterugepal*. *Dow*, i. 58. It must be observed however that if the dates of our history and the Mahommedan history accorded, we should have had in the former, some notice of the repeated visits to Cashmir paid by *Mahmood* in 1005, 1015 and 1018; the history of *Çalhana* coming down to 1025 : one or other however may err by a few years, if indeed the error is not as much of facts as of dates. The author of the *Tabcat Acberi* states indeed that *Mahmoud* was repeatedly foiled in his attempts to penetrate into Cashmir.

CHRONOLOGICAL TABLE.

FIRST PERIOD,

(In which the duration of the several reigns is not specified.)

	Date according to the original.	Adjusted date.
Cashmir colonised by Casyapa	B.C.3714	B.C.2666
Fifty-three Princes; names unknown; reigned	yrs. 1266	1266
Gonerda 1st. Cali. 653 or ..	B.C.2448	1400
Dámodara 1st.		
Gonerda 2nd.		
Thirty-five Princes; names forgotten.		
Lava		
Cusésaya		
Khagéndra		
Surendra		
Godhara		
Suverna		
Janaca		
Sachinara		
Asoca		
Jaloca		
Dámodara 2nd.		
Hushca, Jushca, Canishca } Tartar Princes.		
Abhimanyu		
Fifty-one reigns ending	B.C.118[illegible]	388

The grounds on which the adjustments are made are explained in the following remarks.

SECOND PERIOD,

In which the duration of the several reigns is specified.

FIRST OR GONERDÍYA DYNASTY.

	Years of reign.	Date of the original.	Adjusted date.
Gonerda 3d.	35	BC. 1182	BC. 388
Vibhíshaña	53	1147	370
Indrajit	35 6	1096	352
Rávaña	30	1060-6	334
Vibhíshaña 2nd..	35 6	1030-6	316
Nara	39 9	993	298
Siddha	60	953-3	280
Utpalácsha	30 6	893-3	262
Hiranyácsha ...	37 7	862-9	244
Hiranyácula	60	825-2	226
Vámácula	60	765-2	218
Mihirácula	70	705-2	200
Vaca	63	635-2	182
Cshitinanda	30	572-2	164
Vasunanda	52 2	542-2	146
Nara 2d.	60	490	128
Acsha	60	430	100
Gopáditya	60	370	82
Gokerna	57	310	64
Narendráditya ..	36 3	253	46
Yudhisht'hir	48	216-9	28
Twenty-one Princes reigned	1013 3	or 378 years.	
Average	48	or 18 years.	

SECOND OR ÁDITYA DYNASTY.

Pratápáditya	32	B.C. 168-9	BC. 10
Jalaucas	32	136-9	AD. 22
Tunjína	36	104-9	54
Vijaya	8	66-9	90
Jayéndra	37	60-9	98
Árya	47	23-9	135
Six Princes reigned	192 years.		
Average	32 years.		

THIRD OR GONERDÍYA DYNASTY AGAIN.

Méghaváhana ..	34	A.D. 23-3	—
Sréshtaséna ..	30	57-9	—
Hiranya	30-2	87-3	—
Mátrigupta	4-9	117-5	471
Pravaraséna ..	63	122-2	476
Yudhisht'hir 2d...	39 3	185-2	499
Nandrávat ..	13	224-5	522
Ranáditya ..	300	237-5	545
Vicramáditya ..	42	537-5	568
Báláditya ..	36	579-5	592

Ten Princes reigned 592 years and 2 months, according to the original computation; 433 according to the adjusted one, furnishing in either case an inadmissible average.

FOURTH OR CÁRCOTA DYNASTY.

	Reign.	Date A. D.
Durlabhaverddhana	36	615- 5
Pratápáditya	50	651- 5
Chandrápíra	8 8	701- 5
Tárápíra	4	710- 1
Lalitáditya	36 7	714 1
Cuvalayáditya	1	750- 8
Vajráditya	7	751- 8
Prithivyápíra	4 2	758- 8
Sangrámápíra	7	762- 10
Jajja	3	769- 10
Jayápíra	31	772- 10
Lalitápíra	12	803- 10
Sangrámápíra 2nd.	7	815- 10
Vrihaspati	12	822- 10
Ajitápíra	36	834- 10
Anangápíra	3	870- 10
Utpalapíra	2	873- 10

Seventeen Princes reigned 260 years and five months, averaging little more than fifteen years to a reign: from the commencement of this dynasty therefore the chronology of the original requires no modification.

FIFTH. THE UTPALA OR VERMÁ DYNASTY.

	Reign.	Date A. D.	Date in Cashmir yrs
Áditya Vermá	28 3	875-10	
Sancara Vermá ..	18 8	904- 1	59
Gopála Vermá ..	2	922- 9	77
Sancatá	10 dys.		
Sugandhá Rání ..	2	924- 9	79
Párt'ha	15	926- 9	81
Nirjita Vermá, also called *Pangu* or the Cripple	1	941- 9	96

	Reign.	Date A. D.	Cashmir years.
Chacra Vermá ..	10	942-9	97
Sura Vermá	1	952-9	7
Párt'ha, a second time	0 6	953-9	8
Chacra Vermá do.	0 6	954-3	8 6
Sancara Verdhana	1 6	954-9	9
Chacra Vermá, a third time, ..	1 4	956-3	10 6
Unmatti Vermá ..	2 2	957-7	11 10
Sura Vermá 2d. ..	0 6	959-9	14

Twelve Princes reigned 84 years and five months, averaging little more than eight years to a reign. Besides the *Sáliváhana* æra, the original introduces with this dynasty a new method of computing, by a cycle of 100 years.

LAST OR MIXED DYNASTIES.

	Reign.	Date A. D.	Cashmir years.
Yasascara Déva ..	9	960-3	14 6
Sangráma Déva ..	0 6	969-3	23 6
Párvagupta	1 6	969-9	24
Cshémagupta	8 6	971-3	25 6
Abhimanyu	14 0	979-9	34
Nandigupta	1 1	993-9	48
Tribhuvana	2 0	994-10	49 1
Bhímagupta	4 3	996-10	51 1
Didda Rání	23 6	1001-1	55 4
Sangráma Déva ..	——	1024-7	78 10

Nine Princes reigned to the accession of SANGRÁMA DEVA 64 years and four months, averaging rather more than seven years to a reign.

Remarks on the History and Chronology of Cashmir.

HAVING now completed the sketch of Cashmirian History, it may be expected that we should revert to it for a moment, for the purpose of taking a concise view of the light which it reflects upon the General History and Chronology of the Hindus; objects of more interest than the local transactions which it details, and which, circumscribed within the narrow limits of a petty state, of remote site and difficult access, are neither in themselves, nor in their effects upon their neighbours, of any magnitude or importance: it may be added however that they are of the same general character, as the events which make up History in all countries, and may not be therefore devoid of interest, to the mind that can be contented to contemplate man, in so sequestered a region, as the valley of *Cashmir*.

It appears very evident that *Cashmir* has been a regular kingdom for a period, that transcends the limits of legitimate history, and even if we feel disposed to contest the accounts of our author, and to dispute his series of Dynasties and Princes, we must still rest satisfied with the proof of its existence either under the names of *Caspapyrus* or *Abisarus*,* as early as the days of HERODOTUS and ALEXANDER: there can be no doubt however of the regular organization of this state at a period, much antecedent, and it is probable that in remote times it exercised a more decided interference in the concerns of India, than it has done for many centuries past: it seems

* See Appendix, No. VIII.

highly probable also that it was the original dominion of the *Páńdara* princes, and that it furnished in them, Sovereigns to the plains of Hindustan.

The religion of Cashmir has in like manner been Hindu from a very remote date. Originally no doubt it was the Ophite or snake worship, but this is a part of the Hindu ritual, and the *Nágas* are included in the orthodox pantheon: the adoration of Siva was soon ingrafted upon this, even if the two rites were not originally identified.

It appears that the Bauddha schism was known in Cashmir at a very early period, and possibly preceded the introduction of a fully organized Brahmanical priesthood: it probably in short preceded the introduction of the Brahmanical *caste*. Aśoca, although a worshipper of *Siva*, is said to have countenanced this new faith. His son Jaloca commenced his reign with serious efforts to suppress it, and it was possibly partly with this view, that he introduced the colony of Brahmans from Canouj. Towards the close of his reign however he relaxed in his hostility to the Bauddhists, and his successor, although a pious worshipper of *Siva*, appears to have participated in the same feeling. The legend of Dámodara's transformation, indicates his having incurred the enmity of the Brahmanical order.

The period that immediately ensues, is of great interest in the religious History of India. *Cashmir* became a Bauddha country under Tartar princes, shortly after the death of *Sácya Sinha*, according to our author, and he agrees nearly with the *Chinese* authorities, as to the period at which that legislator flourished, and according to them, in this very country. The latter seems to be an error; it may however indicate the direction where the birth of the elder *Buddha* happened, and in connexion with the circumstances narrated by the Sanscrit writer, seems to point out an extra-In-

dian origin for this religion:* its predominance in *Cashmir* was of short duration, as although not extirpated, it speedily and finally gave way before the preponderance of the Brahmanical faith. If any conclusion might be drawn from such imperfect premises, it might be supposed, that the inhabitants of Cashmir originally followed an idolatrous system of their own, to which they superadded a few ill defined Gods and ceremonies, borrowed from the Brahmans of the plains; that whilst they were yet open to conversion, an attempt was made from the other side, or from Tartary, to introduce Buddhaism amongst them, which was combated and finally frustrated by southern assistance: the national faith of *Cashmir* has ever since continued Hindu, and the almost exclusive form of adoration has been that addressed to *Śiva* and his *Śacti*.

The chronology of the *Rájá Taringiñí* is not without its interest. The dates are regular, and for a long time both probable and consistent, and as they may enable us to determine the dates of persons and events, in other parts of India; as well as in *Cashmir*, a short review of them may not be wholly unprofitable.

The more recent the period, the more likely it is that its chronology will be correct; and it will be therefore advisable to commence with the most

* Sir William Jones alludes to the white and ruddy complexion of Buddha as calculated to convince Mons. Bailly of the *Tartar* origin of this legislator. Mons. Remusat (in the *Journal Des Savans*, Octre. 1819,) commenting on some of the epithets descriptive of Buddha, contained in a Polyglot *Bauddha* vocabulary compiled in *China* (or rather translated from some Indian work, one of the languages being Sanscrit,) notices this epithet *Suvernachhavi* (सुवर्ण छविः) the golden hued, but without being inclined to draw such a conclusion from it as Mons. Bailly might have drawn. The description of this *Buddha* however, as contained in the Vocabulary described by Mons. Remusat, *Mines de L'Orient*, *vol.* iv. connected with the circumstances we have had occasion to notice in the text, tends very much to confirm the idea of the original Bauddha schism having been imported from Tartary. The name of this legislator, *Sacya*, is further evidence to the same effect: its Sanscrit etymologies are very unsatisfactory, and it was not improbably connected with the national name *Sacæ* by which the Eastern Scythians or Tartars were formerly known both in Europe and India. The distinction between the different Buddhas of whom Gautama, prince of *Behar*, was one, must always be borne in mind.

modern, and recede gradually to the most remote dates. The Table prefixed was necessarily constructed on a different principle, and depends upon the date of Gonerda the 3rd, which, as I have previously explained, is established according to the Chronology of the text. GONERDA 3rd lived, according to CALHANA *Pañdit*, 2330 years before the year of *Śaca* 1070, or A.D. 1148, and consequently his accession is placed B. C. 1182: the periods of each reign are then regularly deduced till the close of the history, which is thus placed in the year of Christ 1025, or about 120 years before the author's own time. That the reign of the last sovereign did terminate about the period assigned, we may naturally infer, not only from its proximity to what we may conclude was the date at which the work was written, but from the absence of any mention of Mahmud's invasions, and the introduction of a PRITHIVI PÁLA, who is very possibly the same with the PITTERUGE PAL of *Lahore*, mentioned in the *Mohammedan* histories.

Taking therefore the date of *Didda Ráñi*, as being at least very near the truth, we may go up the list with some confidence through three dynasties at least. The three last series present an aggregate of thirty-eight princes, and but 409 years, giving us less than eleven years to a reign, an average rate, with which the most cautious chronologist may be contented. The first of the three series, which presents the longest average, gives us less than 16 years to a reign, which is equally unexceptionable, and we have therefore every reason to conclude that the chronology of our author is perfectly accurate, as far back as the year 616 of the Christian æra.

The History of *Cashmir* is too purely domestic during the period comprised within these limits, for us to be able to apply the chronology of the author to the establishment of dates, for incidents or persons of interest in the records of Hindustan. ŚANCARA VERMÁ is said to have subverted the extensive empire acquired by BHOJA, and he may be supposed therefore to have been nearly contemporary with that prince. ŚANCARA VERMÁ reigned from 904 to 922. The date of Bhoja is now fixed with tolerable certainty within the limits of the beginning of the tenth and that of the eleventh cen-

tury. The *Rájá Taringiní* however would throw him farther back, if he preceded Śancara Vermá, and place him in the close of the ninth century. We need not expect however extreme accuracy in this matter, and may rest satisfied with considering it as an approximation to the truth, and generally as an additional testimony of Bhoja's having flourished early in the tenth century.

The reign of Jayápíra from 772 to 803 may hereafter throw some light upon the literary history of the Hindus, when the writings of the authors patronized by him shall be met with. It is highly probable that Cshíra is the commentator on Amera, in which case, we have advanced one step in the antiquity of that philologist. What author is meant by *Bhaťťa* is not ascertained; it cannot be Mammaťťa Bhaťťa, the Cashmirian author of the *Cávya Pracáśa*, as that writer must have been subsequent to Srí Hersha, a king of Cashmir, who reigned about 40 years after our history closes, and to whom, or to whose works, frequent reference is made in the *Cávya Pracáśa.*

Another set of names of literary interest occurs in the reign of Lalitáditya, from A.D. 714 to 750. Two of the three are yet to be ascertained, but it is highly satisfactory to have fixed the date of so eminent a writer as Bhavabhuti. If Yaśovermá, king of *Canouj*, should elsewhere appear to be the same as Kírti Vermá, it would tend to some important conclusions in this branch of literary enquiry. The state of India at the period of Lalitáditya's reign is tolerably well detailed by our author, but it is unnecessary to examine the subject here. as it has been dwelt upon at some length in the note relating to his supposed military marches.

After passing the limits of the year 616, the character of our author's chronology undergoes an unfavourable change. Thirty-seven princes in three dynasties reign 1797 years, or on an average more than 48 years each, an average term which very much exceeds possibility, and which can only be explained by supposing either, that the number of princes is defective, and that the reigns of those who have disappeared from the record,

have been added to those of the princes lucky enough to have escaped oblivion, or that the whole are carried too far back into antiquity, and the date of GONERDA from which it starts, having been made much too remote, it was necessary to elongate the respective reigns to fill up the protracted interval: both these sources of error most probably exist, but there seems reason to suppose, that the first is more particularly the cause of the objectionable duration assigned to several reigns.

The Third Dynasty embraces ten princes, and a period of 592 years, but as one of them RAŃÁDITYA engrosses three centuries, the remaining 292 years are to be divided amongst nine kings, giving an average of little more than 32 years to a reign. The most remarkable person alluded to as connected with general history, is VICRAMÁDITYA, the second king of that appellation introduced by our author: he is placed in a period new to the many enquiries regarding his date, or in the year A. D. 117, shortly after which he must have died, according to CALHAŃA *Pańdit*. We have no clue therefore to the identification of this prince, and, in the absence of better grounds of conjecture, may attempt it by adverting to the erroneous reign of RAŃÁDITYA of three centuries, as well as the long reigns of almost all the princes of the dynasty. It seems likely, that the VICRAMÁDITYA, who put the brahman MÁTRIGUPTA on the throne of *Cashmir*, was the prince of that name who lived in the 5th century, or in 441:* that CALHAŃA, or preceding writers, confounding him with the *Sacári* prince, although they did not make him exactly contemporary even with ŚÁLIVÁHAN, placed him fully three centuries too early: that when they came to the *Cárcota* dynasty, they found out their mistake, and could devise no other method of correcting it, than by adding the deficient years to the reign of RAŃÁDITYA, and thus embellishing their history with a marvel. The defeat of ŚILÁDITYA by PRAVARASÉNA, as has been noticed, confirms this view of the subject. The VICRAMÁDITYA of the 5th century reigned, it is said, 100 years, dying in A.D. 541 but according to the *Satrunjaya Mahátmaya*, ŚILÁDITYA was king in 447; we may therefore restrict the father to a sufficiently probable reign of about 35 years, when we shall have PRAVARASÉNA, king of *Cashmir*, in 476. Between his accession, and that of DURLABHA VERDDHANA, we shall then have an

* A. R. ix. 175.

interval of 139 years, to be divided amongst six princes, and although this will give us a little more than the probable average reign, or 23 years for each prince, yet it still is not extravagant, and the excess may either go to form an unusually long reign for RAŃÁDITYA, whence arose the tradition of its lasting for three centuries, or it may be required for the apparent chasm that exists between his reign, and the unconnected succession of the Cashmirian prince, named also VICRAMÁDITYA.

By bringing the reign of PRAVARASÉNA so low as A.D. 476, we are involved in some perplexity, as to the propriety of subjecting the preceding dynasties to a proportionate reduction. If the series of the princes were accurately stated, this would seem to be a necessary consequence, and if besides this we should restrict the duration of each reign to the highest possible average or 20 years, we shall then effect a very material modification of our author's chronology, and reduce his first date from 1182 B. C. to no more than 144 years before that æra. There are however some difficulties in the way of this computation:—

The first is the reign of PRATÁPÁDITYA, a kinsman of VICRAMÁDITYA, placed however by our author 168 B. C. and consequently, according to him, not connected with the *Vicramáditya*, from whose time the *Samvat* æra is dated. This inference so obviously arises from the system of our author's chronology, that it is entitled to but little weight, unless that can be proved unexceptionable. We may therefore conclude that PRATÁPÁDITYA was connected with the family of the SACÁRI VICRAMÁDITYA, and that he lived about the commencement of the christian æra: it does not appear that he was contemporary with his illustrious kinsman. From PRATÁPÁDITYA, to *Pravaraséna*, we have ten princes, and 486 years, which gives us consequently the inadmissible duration of 48 years to a reign. The original chronology is less extravagant, but equally improbable, as that gives us an average of 29 years to a reign: there is an error therefore somewhere in this part of the history, and either the chronology is wrong, or the series of princes is inaccurate. It is worthy of remark, that the course of succession is a very interrupted one throughout the whole period; PRATÁPÁDITYA himself ascends the throne

without any apparent cause. VIJAYA who succeeds TUNJINA seems to have had an equally undefined claim. ÁRYA or the resuscitate d *Sandhimati*, was evidently an impostor, who succeeded JAYÉNDRA, after an interval, which is not specified. MÉGHAVÁHANA, though called the great grandson of YUDHISHTHIR might have been a more remote descendant, and the period assigned for the foreigner Matrigupta's election and government, appears to be much too contracted : it is not unlikely therefore that the transactions of the period are imperfectly narrated, and that the blank intervals created by the omission, have been distributed amongst such portions of the record as have been preserved.

The farther back we proceed, the more likely it becomes, that such omissions have extensively and frequently occurred, and accordingly we find the reigns increase very materially in their assigned duration. The average of the 21 reigns of the first dynasty, exceeds 48 years ; there are however several chasms in the history, which have been noticed at the time of their occurrence, and it is difficult to admit any very material reduction of the date of the first of the series, in consequence of our author's near agreement with the Chinese and Tibetian writers as to the existence of ŚÁCYA about ten centuries anterior to the Christian æra. We have only one clue to a reduction of this date: it is possible, that the text has confounded the original *Buddha*, with the ŚÁCYA of the 6th century before Christ. This is the more probable, because from earlier events it appears that, *Bauddhism* preceded in *Cashmir* the *Śácya* alluded to ; consequently he could not have been the primitive Buddha, the founder of the faith: if this be the case, we shall reduce the date of the 3rd Gonerda to something more than a century and a half subsequent to the GAUTAMA, who flourished about 542 A. C. or to about B. C. 388 and this will leave us an average of no more than 18 years for the reigns of this dynasty.

That the third GONERDA reigned about the beginning of the fourth century before Christ, derives some support from the possible connexion between

some of the Transactions recorded in the history of Cashmir, and those which took place in the neighbouring countries in collateral periods, especially the Turushka or Scythian invasions of Persia.

The temporary occupation of Media by the Scythians, took place according to the most approved computations about the end of the seventh century before the christian æra and they were defeated and expelled about the beginning of the 6th.* This period should correspond in Cashmirian history, on the principles we have adopted for its chronology, with the reign of *Asoka* the third prince anterior to the Tartar rulers, and we find it particularly noticed in his reign that Cashmir was over-run with *Mlech'chhas* or barbarians, possibly some of the fugitives from the power of the Persian monarch, who endeavoured in their retreat to establish themselves in Cashmir.

The Scythian subjugation of Media appears as a single and transitory revolution as recorded by Herodotus, but in the pages of the Persian writers it occurs, only as one of various vicissitudes, in the long struggle for superiority between the sovereigns of Iran and Turan. This war began it appears with Feridun, whom modern writers agree to place about 748 B. C.† Kai Kaus according to the Persians, and Cyrus according to the Greeks, invaded the Massagetœ and was defeated if not slain in the engagement. It was in the reign of this prince and that of his successor, Kai Khosru, that the prowess of Rustem was displayed so fatally in opposition to Afrasiab, and the armies of Turan, and whatever Grecian princes may be regarded as the representative of his masters, it is unquestionable that the periods in which they reigned approach to those of the Tartar conquest of Cashmir. Perhaps however it may be still more satisfactorily associated with events, undoubtedly posterior to the wars, in which Rustem's celebrity

* According to *Larcher* (Traduction D'Herodote) The first 633 B.C. and the second 605 B.C. According to *Volney* (Chronologie D'Herodote.) The Scythian invasion occurred B.C. 625 and their expu sion in 598.

† Malcolm, i. 213. 220. Kennedy, (Bombay Transactions,) ii. 120.

was first acquired, and may have formed an Episode in the t.. ..ous and for a time triumphant invasion of Persia, by the Tartar king ARJASP; when Khorasan was plundered, Balkh was taken, and the old king of Persia LOHRASP was included in the general massacre of the priests and followers of Zoroaster.* If the king of Persia, GUSHTASP, the object of these hostilities, be the same with DARIUS HYSTASPES, as seems probable, these events should have occurred between the years B.C. 521 and 485—By the computation of the Sanscrit text, the Turushka princes must have reigned some time subsequent to *Śácya Sinha*, who as Gautama dates B.C. 542, but it is not at all clear that the three princes were cotemporary, and we have no guide to the duration of their authority, beyond the inferences already alluded to, derived from its ceasing within a century and a half after the death of the legislator: supposing them then to have been half a century later, they will be cotemporary with the war between the Persian and Tartar monarchs, and may have been individual adventurers who took advantage of the temporary confusion to establish themselves in Cashmir: it is also worthy of observation, that as they brought with them a new impulse to the Bauddha religion, so the war between ARJASP and GUSHTASP was entirely religious, arising out of the attempt of the former to compel the latter to revert to the common faith of their ancestors, very probably the *Bauddha* or *Śákyan*, that of the *Sacæ* or *Scythians*, which GUSHTASP had abandoned for the religion of the Medes, the worship of Fire.†

If the Tartar princes then governed Cashmir through the greater part of

* Malcolm's Persia, i. 62.

† In the days of Cyrus, as well observed by *Volney*, the Persians did not worship the elements: this opinion is founded on the account given by Nicolas Damascenus of the pile prepared to burn Crœsus, which Volney infers he derived from Xanthus who wrote a history of the kings of Lydia 40 years before Herodotus: it was on that occasion the historian states, that the Persians established the law, conformably to the oracles of Zoroaster, that Fire should be no more contaminated with the carcases of the dead. *Chronologie D'Herodote*, 251. In the code of the Parsis however the other elements receive equal veneration. Elementa enim omnia tenentur servari pura. *Hyde* Hist. Relig. vet. Per. 414. Persœ nolentes Terram polluere defunctorum corpora non humant, &c. *Ibid.* Yet the *Tomb* of *Cyrus* was very celebrated, and even *Darius Hystaspes* himself is said by Ktesias to have had his *tomb* prepared whilst living—how are these contradictions to be reconciled.

the fifth century before the Christian æra, as appears likely, the accession of Gonerda the third must of course be assigned to the commencement of the fourth, and as the year 150 of Śácya or B. C. 392, fell according to the original within the reign of ABHIMANYU, we may place it a few years subsequent or B. C. 388.

Without venturing to place much reliance on the coincidence of names adverted to in the note (p. 27), we may observe that both it, and the frequent mention of the *Mlech'chhas* which occurs in the succeeding reigns, are favourable to our hypothetical adjustment of the dates, if the barbarians and foreigners alluded to, can be considered to bear any relation to the Macedonian invasion or Bactrian kingdom.

It were too wild an attempt to carry the investigation of our author's chronology beyond the period at which we have now arrived. He pretends not to precision himself. Of the fifty-three princes with whom he has peopled the years that elapse between the first and third GONERDA, thirty-five are without names, and the rest without dates. The singular view he has taken of the æra of CRĬSHṆA will be fully commented on, but it is still too far remote to bear any historical character. We may perhaps however derive from the *Rájá Taringiṅí*, a confirmation of the theories, that place the *Yádava* and *Páṅdava* associates within the limits of the 14th century before the Christian æra.

The eighteen Princes whose names occur in the list will give us, upon the average of 20 years to a reign, 360 years. There are however but sixteen reigns particularised, and supposing these to be the whole number, the computation is but 320 years, which, being added to the date of GONERDA the third, as above conjecturally fixed at B.C. 388, gives us 708 B.C. for the date of CRĬSHṆA and YUDHISHṬHIR. But it is admitted that the first BUDDHA, whose date may be considered at least 1000 B.C.* was something pos-

* BUDDHA, according to Abul-fazl, B. C.	1366	De Guignes,	1027	Jones,	1027
Couplet,	1036	Giorgi,	959	Bentley,	1081
		Bailly,	1031	Ditto,	1004

The later date assigned to this legislator undoubtedly refers to a different person.

terior to the heroes of the great war,* and we require therefore a considerable addition to the years that elapsed between the first and third GONERDA. This addition we may derive from the thirty-five nameless kings, whose insertion probably was designed to fill up the chasm, and will allow two or three centuries to be added to the interval: we shall then perhaps, as a matter of chronological, though not historical accuracy, be near the truth, if we admit the 51 reigns, and give them an average length of 20 years, as we shall then have CRÍSHNA alive about 1400 B. C. a computation which will agree well enough with those which have been made by our most eminent scholars.†

The period that intervenes between the first GONERDA and the colonization of the country under CAŚYAPA is stated in the original to be 1266 years: that the precise extent of this interval has not been recorded with that precision which the author affects, may easily be granted, but there is some reason to suspect that it is very near the truth, and in that case it is of no small importance, as it gives probability to the whole scheme of our conjectural chronology for the Hindu history, and furnishes an additional testimony to the veracity of the Mosaic record.

If GONERDA the first lived about 1400 years before Christ, and 1266 years intervened between his reign and the desiccation of Cashmir, we place that event 2666 years before the Christian æra, and in fact within a near ap-

* SIR WM. JONES says 200 years, according to the Cashmirians, who boast of his (Buddha's) descent in their kingdom, (A. R. i. 425.) If he alluded to the *Rájá Taringiní*, and there is no other Cashmirian authority yet in the possession of Europeans, he must have been misinformed, as far as regards the latter part of this statement; the birth of *Buddha*, either the first or second, being no where mentioned in the work of *Kalhana*, to have occurred within the limits of Cashmir.

† Mr. Colebrooke supposes the *Vedas* were not arranged in their present form earlier than the 14th century before the Christian æra, (A. R. vii. 24;) but VYASA the compiler was contemporary with the heroes of the *Mahábharat*, consequently they flourished about the period assigned in the text. Major Wilford computes the close of the great war, as having taken place B.C. 1370 (A. R. ix.) Dr. Hamilton considers *Sri Krishna* to have lived somewhat later; or in the 12th century before our æra, (*Genealogies of the Hindus, Introduction, p. 24.*)

proximation to the period at which the Deluge may be supposed to have occurred,* and to which event therefore the tradition really relates.

* The ordinary computations place this event A. C. 2349, but late writers of equal research and various sentiments agree in considering this too recent.—*Dom Clement.* "L'Art de verifier les dates," make its date A. C. 3310. (Journal Des Savans. Fevrier, 1820). A writer in the Classical Journal (*Sir Wm. Drummond* apparently) estimates the date 3128 years before the birth of Christ (C. J. 24. 153) and the *Rev. G. C. Faber*, following the chronology of the Samaritan Pentateuch, places the Deluge A. C. 2938. (Origin of Pagan Idolatry, vol. iii. 669.) Even then if we admit the original chronology without alteration, it will not be very far beyond the first of these periods, and it comes within the limits of the two hundred theories of Christian writers, which have taken a range of from 6984 to 3616, for the number of years that elapsed between the creation and the commencement of our æra.

APPENDIX.

No. I.

Legend of the drying of the Valley of Cashmir, from the Wakiat-i-Cashmir.

گویا که عالم آب بود وجاي برامدن نداشت ودرمیان اب جلدیو نام دیوي ادم خور
سکونت ورزیده علم تسلط وتغلب برافراشت اطراف وجوانب انرا سیرکرده هرجا چیزي
مي‌یافت برده وخورده و ویران کرده مي‌امد مدتي برین منوال کذشت اتفاقا کشف نام
عابدي پسر ماریچ که بعقیده اکثر هنود نبیره برهماست وقتي بزیارت معابد میرفت
بکوهي سمیر نام رسیده ان ولایت را خراب یافت و درتحقیق وتفتیش سبب ان شتافت
مردم اطراف کفتند که جلدیو نام دیوي است میان ستي‌سر ازانجا برامده مردم را
مي‌کشد وباز باب میرود دل کشف برحال مردم بدرد امد وهزار سال درموضع نویدن
که مکان مشهور نزدیک هیره‌پور است عبادت کرد ومهادیو که باصطلاح هنود پروردکار
را کویند ازکثرت عبادت دریافت او برحم امد ومدعاي او راپرسید او استدعاي
دفع شر جلدیو کرد مهادیو بشن وبرهما را که ازکارکنان مهادیو اند بدفعش
فرستاد بشن تاصد سال با جلدیو جنک کرد بنابر شدت اب وکثرت سیلاب دست
برو نیافت اخرالامر حیله انکیخت درنواحي باره‌موله لختي ازکوه کنده بدررو اب
بهم رسانید وزمین مسطح کشت ان دیو را بدست اورده کشت و مکان وسیع از اب
ظاهر کردید و بکشف سر مسمي کشت کشف سر کوه را کویند یعني کوه کشف

The country was entirely covered with water, in the midst of which a demon, *Jaladeo*, resided, who preyed upon mankind, and seized on every thing and person he could meet with in the neighbouring regions. It happened at length that CASHEF, the son of MARICHI, and according to some accounts the grandson of BRAHMÁ, visited this country, and having spent some time in pious abstraction on mount *Sumer*, turned his attention to the desolated appearance of the earth, and enquired its cause: the people told him of the abode of *Jaladeo* in *Sati Sar*, and his predatory incursions upon them. The heart of *Cashef* was moved to compassion, and he took up his residence in *Noubadan*, near *Hirapur*, for a thousand years, employing that period in religious austerities; in consequence of which, MA-

HÁDEO appeared to him, and assented to his prayers for the extirpation of *Jaladeo*. MAHÁDEO accordingly sent his servants VISHNU and BRAHMÁ to expel the demon. VISHNU was engaged in the conflict 100 years, when finding that the mud and water afforded a secure retreat to the *Deo*, he at last made the chasm at *Baramouleh*, by which the waters were drained off, the demon exposed, taken and slain, and the country recovered and rendered habitable; being thence called *Cashef-Sir*, or the mountain of *Cashef*.

No. II.

Snake worship in Cashmir.

WE have frequent occasion to notice the important figure which snakes and snake deities make in the worship and traditionary history of *Cashmir*. The extent and permanence of the superstition we may learn from *Abulfazl*, who observes, that in seven hundred places there are carved figures of snakes, which they worship. *Ay. Ac.* ii. 148. His statement is in fact taken from the text of PUNYA BHATTA: for its being as old as the age of ALEXANDER, we have what may be regarded as sufficient, though indirect testimony; for ONESICRITUS, as quoted by STRABO, avers, that ABISARUS, who we shall hereafter see is a misnomer for *Cashmir*, or a part of it, is said by his embassadors to cherish two enormous dragons, παρ' ὧ δύο δράκοντας ἀπήγγελλον οἱ παρ' αὐτοῦ πρέσβεις τρέφεσθαι τὸν μὲν ὀγδοήκοντα πηχῶν, τὸν δὲ τεσσαράκοντα, πρὸς τοῖς ἑκατὸν, ὡς εἴρηκεν Ὀνησικρίτος.

Apud quem, *Abisarum*, legati ab eo missi, nunciaverunt, duos dracones nutriri, alterum octoginta cubitorum longitudine, alterum centum et quadriginta, ut Onesicritus refert. The Oxford editor judiciously observes on this passage; "Serpentes in India nonnulli pedes 30 longitudine æquant; nulli autem superant. Quo circa hæc legatorum relatio, ad cultum Idolatricum referre videtur, nam Idola esse magnitudinis vere mirabilis, in templis Indorum constat. Exinde Dracones esse ingentes figuras in templis suspicor, et legati vel vivos existire finxerunt, vel *Macedones* eorum Lin-

guam minus intellexerunt. Page 994 and note.—*Mr. R. P. Knight*, in his inquiry into the Symbolical language of ancient Art and Mythology, (*Classical Journal, vol.* xxiii. p. 14) states, upon the authority of *Maximin of Tyre*, that when *Alexander* entered India, "TAXILUS, a powerful prince of the country" (he was raja of the *Tacshasilas*) "showed him a serpent of enormous size, which he nourished with great care, and revered as the image of the God whom the Greek writers from the similitude of his attributes called Dionysus or Bacchus." Whether the Cashmirian worship of snakes was mystical, at least in the earliest ages, may be questioned. There is likewise reason to suppose that this worship was diffused throughout the whole of India, as besides the numerous fables and traditions relating to the *Nágas* or snake gods, scattered through the *Puránas*, vestiges of it still remain in the actual observances of the Hindus. It seems not improbable that the destruction of the whole serpent race by JANAMÉJAYA, the son of PARICSHIT, recorded in the *Puránas* as a historical fact, may in reality imply the subversion of the local and original superstition, and the erection of the system of the Vedas upon its ruins.

No. III.

Of the Pandæa Regio of the Classical Writers.

IN this as in several instances we may trace apparently very different places, some not very far remote, however, and all not improbably resolvable into the same, or at least in some manner connected. We have in the first place a city of the Sogdians, called *Panda*, as PLINY, vi. 16, Ultra Sogdiani, oppidum Panda: and SOLINUS (c. 49) Ultra hos (Bactros) Panda, oppidum Sogdianorum. The same authorities mention a Gens Panda or Pandea gens, whom Pliny (vi. 20) places low down on the Indus, near its mouths. SOLINUS (c. 52) probably intends to assign them a similar site. ARRIAN says the Pandæan region was denominated after *Pandæa*, the daughter of Hercules, it being the country in which she was born, and

which he governed καὶ τὴν χώρην ἰδίαιε ἐγένετο καὶ ἥστινος ἐπέτρεψεν αὐτὴν ἄρχειν Ἡρακλέης, Πανδαιην, της παιδός επώνυμον, but he does not indicate its locality beyond the remark that *Hercules* was particularly venerated by the *Suraseni*, the people on the *Jobares*, whose chief cities were *Methora* and *Kleisobora*, these being in fact the *Surasenas* on the Jamuna, one of whose capital cities was *Mat'hura*, and we might consequently suppose he meant by the *Pandæa regio*, the country along the western bank of the Jamuna. The next authority, and who first speaks with precision of the situation of the northern Pandyans, (for we need not here advert to the *Pandion* of the Peninsula) is PTOLEMY; he fixes them at once in the Punjab, about the Hydaspes, the *Vitasta*, or river of Cashmir; Περὶ δὲ τὸν Βιδάσπην ἡ ΠΑΝΔΩΟΥ (πανδοούων) χώρα, Circa autem Bydaspum, *Pandovorum* regio; a place, where, agreeably to the views of the text, we might expect at the period of the history of the *Mahábhárat* to find them. That they came originally from *Sogdiana* would be also in harmony with our view of the subject, and their occupation of the upper part of the Doab is matter of fact. It is also probable that the same race extended themselves southward to *Cambay* and *Guzerat*, and ultimately to *Madura*, in the south, known to the classical Geographers as *Madura Pandionis*, the various positions being all correct at various epochs, and marking the migratory course of the descendants of PANDU. The accounts gathered by MEGASTHENES, which are adopted by ARRIAN and PLINY, of the customs of this country, and its traditionary history, are obviously to be traced to Indian sources, and are connected with the history of the *Pándavas*. It was the only Indian country governed by Queens they observe. We have a *Stri Rájyam*, or feminine government, frequently noticed in the text, but this lay to the east. The notion seems really to have originated in the practice of one woman being married to several husbands, a practice prevailing still throughout the Himalaya, and of an antiquity prior to the marriage of the five *Pandava* brethren to DRAUPADI; YUDHISHTHIR observing, in answer to the objection urged by her father DRUPADA, that they only follow in this polyandrian marriage, the path trod by other princes, पूर्व्वैर्यातमनु पूर्व्वेण यातं वर्त्मानुयामहे॥ (*Mahabh. Adi. p.*) We have seen above that the Pandean country, according to Me-

GASTHENES was denominated after a Queen who was the daughter of *Hercules*, a demigod, especially venerated by the *Suraseni*, and these ideas are of Indian origin although corrupted and disfigured, for PRIT'HÁ or CUNTI wife of PÁNDU and mother of the PANDAVAS, was the daughter of ŚÚRA, king of the *Surasénas*. शूरोनाम यदुश्रेष्ठो वसुदेवपिताभवत्। तस्यकन्या पृथा नाम रूपेणाप्रतिमा भुवि ॥ "ŚÚRA the most illustrious of the *Yadus*, was the father of VASUDEVA; his daughter named PRIT'HÁ was of unequalled beauty." *(Mahabh. Adi. P.)* The identity of place and persons is therefore unquestionable: as to HERCULES he may have been readily fabricated out of ŚÚRA which, in its usual import means "a Hero," or the Herculean exploits of BALARÁMA may have given to the *Greek* a reasonable pretext for assigning to him a Grecian appellation.

No. IV.

On the date of Yudhishthir, &c.

THE original passage is here subjoined together with its most obvious translation, and the chronological results which it appears to authorize.

अष्टषष्ट्यधिकामब्दशतद्वाविंशतिं नृपाः। अपोपलंस्ते काश्मीरान् गोनर्दाद्याः कलौ युगे।
भारतं द्वापरांते भूद्वार्त्तयेति विमोहिताः। केचिदेतां मृषा तेषां कालसंख्यां प्रचक्रिरे।
लब्धाधिपत्यसंख्यानां वर्षान् संख्याय भूभुजां। भुक्तात्कालात्कलेः शेषो नास्त्येवं तद्विवर्जितात्।
शतेषु षट्सु सार्धेषु त्र्यधिकेषु च भूतले। कलेर्गतेषु वर्षाणामभवन् कुरुपांडवाः। लौकिके
ऽब्दे चतुर्विंशे शककालस्य सांप्रतं। सप्तत्र्यधिकं यातं सहस्रं परिवत्सराः। प्रायस्तदो
गोनर्दादारभ्य शरदान्तदा। द्वे सहस्रे गते त्रिंशदधिकञ्च शतत्रयं। वर्षाणां द्वादश
शतो षष्टिः षड्भिश्च संयुता। भूभुजां कालसंख्यायां तद्वाप्यं वाशतो मता। ऋक्षाद्दशं
शतेनाद्रेर्यात्सु चित्रशिखंडिषु। उच्चारे संहिताकारैरेवं दत्तोत्र निर्णयः। आसन्मघासु मु
नयः शासति पृथ्वीं युधिष्ठिरे नृपतौ। षड्द्विकपंचद्विगुतः शककालस्य राज्यस्य।

Gonerda and other kings governed Cashmir in the *Cali yug* 2268 years. Misled by the Bhárata (war) being said to take place at the end of the *Dwapara* age, some consider these computations as incorrect. Taking the

number of princes, and the aggregate of their reigns, and deducting it from the portion of the *Cali* (that has past) the remainder does not agree with that (that should be left:) abandoning that (computation,) the year of *Cali* 653, being passed, the *Curus* and *Pandus* existed. In the current year the 24th (of the Cashmirian cycle) of the present æra or Saca 1070, from the 3rd *Gonerda* 2330 years have elapsed; the sum of the reigns of the fifty-two princes was 1266. Confirmation of the date is derivable from the calculation made by astronomical writers of the motion of the seven *Rishis*, which goes from star to star (i. e. performs a complete revolution,) in 100 years, and the *Munis* being in *Magha*, the earth was governed by *Yudhishthir*, the æra of whose Government is 2526.

The 3rd *Gonerda* is the *Kenund* who succeeds ABHIMUN, the first prince, whose term of ruling is particularized in the *Ayin-Acberi*, and in the original: the preceding series of princes in both is without specific dates, but as the number of reigns in that series may be considered as either 50 or 52, it so far agrees with that of the first fifty-two monarchs whose names are not recorded, and the aggregate of their reigns although not mentioned, may probably be considered the same, or 1266 years. I am not quite sure indeed that the 1266 years do not belong to the series of which the names are specified, and that *Abulfazl* or his guide have not erred in placing them opposite to the fifty-two unknown sovereigns: however, be that as it may, if we allow 1266 years from *Gonerda* the first, to *Gonerda* the third, and 2330 years from *Gonerda* the third to the years of *Sáliváhana* 1070=A. D. 1148, we shall come pretty near to the æra of the *Curus* and *Pandavas* as given in the above extract. Sáliváhana 1070+78. A. D. 1148

A. D. 1820

Years 672 ago.

Present year of the *Cali* 4920—672=4248 years.

From Gonerda 3rd, - -	2330	
Gonerda 1st - - - -	1266	
		3596
Unaccounted for years of the *Cali*,		652

being the period that preceded GONERDA 1st, but he was contemporary with *Yudhishthir* and consequently that prince was alive in the year of *Cali* 652, which sufficiently corresponds with the notion mentioned by our author, of the *Curus* and the *Páńdus* existing after the year of the *Cali Yug* 653.

A different mode of calculation will come much to the same thing, making however the period close in the *Saca* year 1073 instead of 1070 as above: what the author means by the *Laukika* or current year 24, is explained in the close of the history, and refers to the year of a particular cycle peculiar to *Cashmir*.

	Years.
From the 3rd *Gonerda*, - - - - - - - - - -	2330
From the 1st to the 3rd, - - - - - - - - - -	1266
	3596
Years of the *Cali* to the 1st *Gonerda*, - - - -	653
	4249
Deduct from the present *Cali* year - - - - - -	4920
	671 years ago.

Deduct the same from the present *Śaca* year 1744—671....1073
Year of *Śaca* referred to - - - - - - 1073=A. D. 1151

A third calculation turns upon the time specified on the authority in fact of VARÁHÁMIHIRA, as the duration of *Yudhishthir's* æra, which according to the opinion of most *Pandits* ceased with the institution of *Vicrama's*.

This period comprehends - - - - - - - -	2526 years.
Added of *Saca* years - - - - - - - - -	1070
	3596

The *Śaca* year 1070 (1744—1070) was 674 years ago and 4920—674=4246

of the *Cali*. But by this only 3596 years are accounted for, and there is remaining of the *Cali* 650: however our author here brings *Yudhishthira's* æra to the *Sálivâhana* æra, as otherwise the difference between that and *Vicrama's* or 134 years, must be added to the 650; he also computes the difference between *Vicrama* and *Sálivâhana* to be 135 years; we are then quite in possession of his meaning, for;

Years of the *Cali* to the æra of *Yudhishthir*, -	653
Year from *Yudhishthir* to *Sálivâhana*, - -	2526
Years from Sálivâhana to our author's own date,	1070
Total of the *Cali*	4249

being nearly the same as the result of our first calculation, and but three years more than in our last calculation being the difference required in confirmation of our author's theory. *Major* WILFORD makes the years of YUDHISHTHIR extend to the *Sálivâhana* æra (A. R. ix. 211.) Mr. Colebrooke has given the passage relating to the revolution of the seven *Rishis*, and has described the theory which states it; as has *Major* WILFORD in the first pages of the same volume (87, 88, &c.) With respect to the period of the commencement of the *Cali* age our author's notions are the same as those commonly received.

No. V.

On the War between JARASANDHA *and* CRISHNA.

ALTHOUGH the name of GONERDA does not appear in the *Mahâbhârat*, yet there is an account of an inveterate and sanguinary war between JARASANDHA and CRISHNA, in the course of which a battle on the *Yamuná* took place, when HAMSA and DIMBICA two princes in alliance with the former, were killed. HAMSA was defeated by BALARÁMA, driven into the *Yamuná* and drowned. The cause and course of this war are narrated in the *Mahâbhârat* with great appearance of probability, and throw considerable

light on the history of CRISHŃA and of India, in his time: its substance may therefore be not unacceptable. JARASANDHA, king of *Magadhá*, is described as a powerful prince: he held in alliance or subjection, SIŚUPÁLA, king of *Chedi;* VACRA or VACRADANTA, king of *Cárusha;* the powerful prince of the *Yavanas;* BHAGADATTA, king of the south and west; the kings of *Banga* and *Puńdra*, of the *Surasénas*, *Bhadracáras*, *Bodhas*, *Sálwas*, *Paráwaras*, *Sust'halas*, *Mucutas*, *Pulindas*, *Sálwáyanas*, *Cuntyas*, Southern *Pánchalas* and Eastern *Cośalas*, and he had driven eighteen families of the Northern *Bhojas* to the westward, and the *Mátsyas* to the south. CANSA, king of *Mat'hurá* was married to the daughter of JARASANDHA, and it was to revenge the murder of his son-in-law, that the latter levied war upon CRISHŃA. According to the *Mahábhárat* this war continued for three years, and in the *Bhágavat* it is said, that JARASANDHA besieged *Mat'hurá* eighteen times. Both authorities agree in the result. CRISHŃA was obliged to fly, and take refuge with his family and followers, in a strong place on the west coast of India, where he built the city of *Dwáracá*. JARASANDHA's power was an insuperable obstacle to YUDHISHT'HIR's performance of the *Rájasúya* sacrifice, or in other words to his pretensions to be considered supreme monarch of India. This impediment was sagaciously interwoven by CRISHŃA with his own quarrel, and induced the *Pándava* princes to arm in his behalf. Accompanied by BHÍMA and ARJUNA, CRISHŃA entered *Behar* by a circuitous route, passing under the hills through Gorackpore and Tirhut, and he thence appears to have taken JARASANDHA unprepared for defence; the text when reduced to common sense, importing, that the monarch was surprised in his capital, and after a conflict of some days killed in single combat by BHÍMA. The occurrence does not appear to have produced the expected consequence, as it was undoubtedly one of the causes of the great war between the *Pándava* and *Caurava* princes, one of the effects of which was to prevent CRISHŃA from recovering the territory, he had murdered his uncle to obtain. KERŃA, the illegitimate son of CUNTI, the daughter of ŚÚRA king of *Mat'hurá*, who appears to have held that territory after JARASANDHA's death, being probably placed, and undoubtedly maintained in it, by the

Caurava princes, to whom he was a faithful and valuable ally. These occurrences furnish a satisfactory clue to the close confederacy that subsisted between CRISHṄA and the *Páńdava* brethren; his expulsion from *Mat'hurá*, and foundation of a city on the Malabar coast. Before closing the note, we may advert to the mention of the powerful *Yavanádhipa*, amongst JARASANDHA's allies or tributaries: he is said to possess boundless authority, and to reign over the west like another *Varuna*. From this passage, and others not unfrequent, in which respectful mention of the *Yavana* power is made in the *Mahábhárat*, we may at least infer that the date of its composition was posterior to the Macedonian invasion of India. By the time of the composition of the *Sri Bhágavat*, the *Yavanas* had assumed a new shape, the name being applied to the *Mohammedans*, and the feelings of the author have evidently influenced his narration. The prince, who in the *Mahábhárat* is a powerful king, and is no otherwise distinguished than as one of JARASANDHA's many allies, becomes in the *Bhágavat*, *Yavanásur*, a titan or fiend who attacks CRISHṄA of his own accord, and whose assault, combined with the approach of *Jarasandha*, with which however it is not connected in the way of confederacy or alliance, causes the Demi-god to remove his family to *Dwáracá;* he himself leads the Demon into a snare, and destroys him. The whole story of the war and the character of CRISHṄA indeed are changed from history to legend in this work, which is manifestly the most modern of the *Puráńas*. The precise dominion of the *Yavanádhipa*, said to comprise *Maru* or *Muru* and *Naraca*, is not easily identified, although many traces of the former name present themselves, as in the *Maruca* of *Ptolemy*, a city of Sogdiana, and in the two *Merus*, *Meru al Rud* and *Meru Shajehanabad* of Khorasan, of which, the latter is an antient city, its foundation being ascribed to *Tahmuras*, or in later times, to *Alexander*, whilst, as the same with Antiochia or Seleucia, it was at one period the capital of the Bactrian kingdom. If the *Maru* of the *Mahábhárat* be either of these, therefore, the king of the *Yavanas* is the Bactrian monarch: indeed the same prince is most probably intended even if we carry the application of the terms to a more southerly latitude to which they very legitimately appertain. *Maru* (मरु) properly means a desert and ill-watered region; hence it is applied to the sandy

desert along the Indus, extending westward to *Kirman* and *Mukran*, *Maru* and *Naraca* may then imply the *Sindhic* provinces, and these were reduced under the authority of the Bactrian monarch, if we may trust to *Strabo* and his guides, who state that that sovereign not only held *Pattalene*, but the territories of Tessariostus and Sigertis along the sea coast. οὐ μόνον την Πατλαλήνην κατέσχον ἀλλὰ καὶ τῆς ἄλης παραλίας τήν τε Τεσσαρίοςου καλουμένην και τήν Σιγέρτιδος βασιλέιαν.

No. VI.

On the Gandhâras or Gandarii and other Nations of the Panjab and North West of India.

Sindhu Gandhar, सिन्धुगन्धार, is the phrase of the original—the *Gandhar* of the Hindu writers has been always regarded by them as the *Candahar* of the Mohammedans, and the text here not only corroborates the notion, but by connecting the *Indus* with the province, shews, that at least a subdivision of it extended beyond the limits now assigned to *Candahar*, and carries it across the southern portion of *Afghanistan*; the Hindu name was known to the ancients, and Herodotus, enumerates the *Gandarii*, as a people of one of the twenty satrapies of the Persian Empire under *Darius Hystaspis*, and subsequently as serving in the army of Xerxes Σατταγύδαι δὲ καὶ Γανδάριοι καί Δαδίκαι τε καὶ Ἀπαρύται ες τωυτο ἱεταγμένοι ἑβδομήκοντα καὶ ἑκ αἶὸν τάλαντα προσέφερον, νομὸς δὲ ὗτος ἑβδομος.

Tha. 91. "The *Sattagydæ*, *Gandarii*, *Dadicæ* and *Aparytæ*, were classed together and contributed 170 talents, and this was the seventh prefecture." Again, Πάρθοι δὲ καὶ Χοράσμιοι και Σογδόι τε καὶ Γανδάριοί και Δαδίκαι ἐστρατεύοντο. The *Parthi*, *Chorasmi*, *Sogdii*, *Gandarii*, and *Dadicæ* served in the army. *Pol.* 66. The two last it appears were united under one command Γανδαρίων δὲ καὶ Δαδίκεων, Αρτύφιος ὁ Ἀαρτβνάου. "*Artyphius*, the son of *Artabanus*, commanded the *Gandarii* and *Dadicæ*."—*Ibid.* By the Dadicæ were no doubt intended the *Daradas* or *Daradacas* (दारदः or दारदकाः) with whom we often meet in the text, as the inhabitants of the rugged tract lying west

of Cashmir, or the site of the modern *Durds:* the term however is applicable to any of the tribes inhabiting that portion of the great Indian chain, as its import is merely, mountaineers, and the *Dadicæ* as the contiguous neighbours of the *Gandarii* were therefore probably the mountaineers of *Ghizni* and *Ghaur.* In Ptolemy's time the position of the *Durds*, or as he calls them almost correctly, *Daradræ*, was pretty accurately known; he says Ὑπὸ δὲ τὰς τοῦ Ἰνδοῦ πηγάς ΔΕΡΑΔΡΑΙ, καὶ ἡ ορανὴ αὐλῶν ὑπέρ κεῖται. sub fontibus *Indi*, *Daradræ*, et horum montana supereminent. Who the *Sattagydæ* and *Aparitæ* were, is not so satisfactorily traceable: if we may take etymology as a guide they were *Hindu* tribes: *Sattagydæ*, may be resolved into *Sátgerhi*, the district of the seven strong holds, a sort of nomenclature very common in India; and the *Aparitæ* may be derived from *Apara*, ulterior or western, or if *Aparbartica*, the reading of *Isidore* of *Charax* be applied to the same people, as suggested by *Major Rennell*, we may refer this to *Apárbataca*, a low-lander, one not a mountaineer, in opposition to the *Dáradacas* or *Dadicæ* before mentioned: a more satisfactory evidence of *Hindu* identity may be derived from the lists of countries extracted from original Sanscrit works, and published by *Major Wilford* in the 8th volume of the Researches: amongst the northern countries (p. 340,) and in a series including *Gandhár*, we have the *Sátacas* who may be the same as *Sattagydæ*, and in another groupe of a miscellaneous character, but comprehending *Balkh*, *Arachosia*, &c. we have the *Aparitas*, a very close approximation to the *Apurytæ* of *Herodotus.* In short from these considerations it appears that there is some reason to doubt the accuracy of the opinion entertained by the able geographer of *Herodotus*, that the 7th *Satrapy* consisting of the above tribes, lay to the west of *Bactriana* and *Aria*, and that the *Gandarii* may be traced to a town called *Caendar* on the frontiers of *Khowarezm.* (Geography of Herodotus 295 et seq) there does not appear any occasion to seek for this Satrapy in so westerly a position and as far as the *Gandarii* are concerned, their easterly situation rests not only on Hindu but classical authorities.

The *Gandaritis* of STRABO which furnishes an approximation to the

Gandarii of Herodotus is placed nearer even to the Indus than the modern city of *Candahar:* he observes, it was watered by the *Choaspes* which falls into the *Cophenes:* he has also a *Gandaris* which he places between the *Hydraotis* (the Ravi) and the Hydaspis, (the Beyah) and consequently towards the eastern part of the Punjab. *Ptolemy* only notices the first position, bringing it rather more to the west, unless as *Salmasius* conjectures, his *Suastus* is the *Cophenes* of *Strabo*, and making the Indus the eastern boundary of the *Gandari*. "Inter *Suastum* et *Indum* sunt *Gandaræ*." The Hindu system agrees with, and reconciles these different accounts, for according to the *Mahábhárat*, the *Gandhari* are not only met with upon crossing the *Setlej*, and proceeding towards the *Airávati* (Ravi) or where STRABO places *Gandaris*, but they are scattered along with other tribes throughout the Punjab, as far as to the Indus, when we approach *Gandaritis*. According also to our text, one body of the *Gandhari* appear to occupy a division of their own, on the last river, which is named after that very circumstance, *Sindhu Gandhar*, and these may have extended westward as far as the modern Candahar. PLINY and POMPONIUS MELA evidently intend a different people by their *Gandari*, or more properly *Candari*, who were a *Sogdian* not an *Indian* tribe, as *Salmasius* observes, and as is stated by Ptolemy. These may perhaps be referred to the *Caender* of Major Rennell, but analogies resting on a supposed similarity of sound, are very fallacious, as *D'Anville* has shewn, when he criticises *De Barros* for inferring that *Candahar* was one of the cities built by *Alexander*, of whose name its appellation was a corruption: the city being called corruptamente Candar, havendo de dizer Scandar, nome per que os Persas chamam Alexandre (Decade iv. lvi. c. i.) when at the same time he falls into a like error, and derives *Candahar* from *Kond ou Kand* qui dans le Persan designe une Fortresse (Antiquité geographique de L'Inde;) a meaning which قند, the word being written قندهار no where possesses. *De Barros* is not singular, for *D'Herbelot* has the same conjecture, respecting the origin of *Candahar*, and he is followed by *Meninski*, but the name of Alexander سكندر is never written by the orientals with the Arabic ق, the initial of *Candahar*, and it was no doubt

employed to express the harder sound of the ग in the Hindi name गन्धार; the aspirate also is preserved in both these words whilst none is to be found in Alexander's name.

The confusion arising from an inaccurate mode of writing or reading names, prevailed as much amongst ancient as modern writers, and in classical authors much unnecessary perplexity has been occasioned, by their erroneously confounding the *Gandaritæ* or *Gandaridæ* of the Punjab, with the *Gangaridæ* or the nations along the river Ganges. They seem indeed to have gathered scattered notices of places and nations from different sources, perhaps originally tolerably accurate, but which were distracted and confounded in the hands of the writers themselves. Something of this nature occurs in the Periplus of *Arrian*. Between *Barygazæ*, unquestionably as has been shewn by Dr. Vincent, *Baroach*, and *Bactria*, he places various nations as τό τε των Αρατρίων καὶ Ραχέσων καὶ Ταυθάραγῶν και της Προκλίδος ἐν ὅις ἡ Βακέφαλος Αλεξάνδρεια καὶ τεῦτω ἐπ' ἄνω ἔθνος Βακτριάνων. The author as Dr. Vincent observes is a better merchant than a historian, and it may be added, than a geographer, beyond the maritime districts: his meaning however is clear enough, and he passes from Guzerat to the Punjab, as appears by the situation he has given Alexandria Bucephalos, which according to *Strabo* was built upon the Hydaspes. Proclis is possibly the same with the Proclais of Ptolemy and Peucolais of Strabo, supposed by Major Rennell to be the modern Pekheli (Memoir of a Map of Hindostan, 171). The *Tantharagi*, SALMASIUS conjectures with probability to be an error for *Gandaridæ*. The *Rac'hosi* inhabit most probably the *Roh Cuj* of the *Puráñas* identified by Col. Wilford with Arachosia (A. R. vol. viii. 336.) and it only remains to dispose of the *Aratri*, which we are able to do most satisfactorily, the *Mahábhárat* declaring that the countries situated upon the *Satadru* (Setlej), *Vipasa* (Beyah), *Airávati* (Ravi), *Chandrabhaga* (Chinab), *Vitastá* (Jelum), and the *Sindhu* (Indus), and without the range of the *Himálaya*, are all called *Áraṭṭás*, शतद्रुश्च विपाशा च तृतीयैरावती तथा। चन्द्रभागावितस्ताच सिन्धुःषष्ठो बहिर्गिरेः॥ आरट्टा नाम ते देशानधर्मानतान्व्रजेत्। *Mahábhárat*

Kerna Par. One of their cities, *Sácala*, is palpably the same with one of the *Pándava* cities of PTOLEMY, or *Sagala.*

We have in the *Mahábhárat* another people of the Punjab, intimately connected with these tribes, the *Madrás*, and whom we may endeavour to trace in classical writers. They are sometimes confounded with the *Gandháras*, but are really distinct, having a different sovereign, and being both separately mentioned in various lists of the northern countries: the nearest classical approximation to them is the *Mardi* of Pliny, the mountaineers bordering on Bactria, who, MAJOR RENNELL supposes were the mountaineers of Gaur. (Geography of Herodotus 283). Major Rennell following *Monsr. D'Anville* infers from the repeated occurrence of this name to designate various fierce intractable tribes, that it was the generic name of such nations. Monsr. D'Anville too derives it from the Persian (مرد) *mard*, a man, "un terme qui appartient a plusieurs idiomes de l'orient et entre autres le Persan, pour designer au propre ce que *vir* designe en Latin, se prenant aussi pour l'equivalent de *Bellator*, et meme dans une qualification injurieuse comme celle de *Rebelli:*" he connects also the character of these people with the old stories of *Martichora*, the man-eaters of KTESIAS, to whom THEVENOT found a modern parallel in some Indian tribes of the Dekhan, and who were denominated *Mardi Coura* ou mangeurs d'hommes by their neighbours. It might be inferred that *Ktesias* intends Μαρτιχωρα which he explains Anthropophagos, to be the Indian denomination of his man-eating monster, but as he received his fables through a Persian medium, he has retained the Persian not the Indian name (مردخور), from *Mard*, a man, and *Khor*, who eats: for this particular notion, a source is easily found in the *Rácshasas* or fiends of the Hindus, and the legend relating to the sons of VASISHT'HA, who were all devoured by CALMÁSHAPÁDA, which is told in the *Mahábhárat*, and the scene of which lies in the Punjab, might have furnished KTESIAS with the fiction in question.

Monsr. D'Anville observes " n'est on pas fort etonné que dans un pays ou par un principe de religion tres ancien, l'abstinence en nourriture de toute

chair d'animal est recommandée, il y ait des anthropophages;" and the incongruity of several Indian customs as described by the historians and geographers of antiquity is in many other instances no less surprising. The incompatibility of their accounts with our received notions, has reflected some discredit upon the veracity of the authors, but making due allowance for imperfect information, and a leaning to the marvellous, inseparable from our nature, we have no reason to accuse MEGASTHENES particularly of untrath; of this the *Madri* or *Mardi* will furnish us with an illustration: they are described along with the other people of the Punjab by Sanscrit authorities, in terms which fully justify the classical writers, and which prove that the various restraints of Hindu polity were either unknown to the north western tribes, or were very little regarded by them: a few passages from the KERNA *Parva* of the *Mahábhárat* will afford to the scholars of Europe an opportunity of instituting a more particular comparison. KARNA addresses *Salya*, king of *Madra*, to the following effect:

"An old and excellent Brahman, reviling the countries *Báhica* and *Madra* in the dwelling of DHRITARÁSHTRA, related facts long known, and thus described those nations. External to the *Himaván*, and beyond the Ganges, beyond the *Saraswati* and *Yamuna* rivers and *Curucshetra*, between five rivers, and the *Sindhu* as the sixth, are situated the *Báhícas;* devoid of ritual or observance and therefore to be shunned. Their fig-tree is named *Goberdhana*, (i. e. the place of Cow-killing,) their market place is *Subhadram*, (the place of vending liquor: at least so say the commentators) and these give titles to the door-way of the royal palace. A business of great importance compelled me to dwell amongst the *Báhícas* and their customs are therefore well known to me. The chief city is called *Sácála* and the river *Apagá:* the people are also named *Jartticas* and their customs are shameful: they drink spirits made from sugar and grain, and eat meat seasoned with garlic, and live on flesh and wine: their women intoxicated appear in public places, with no other garb than garlands and perfumes, dancing and singing, and vociferating indecencies in tones more harsh than those of the camel or the ass: they indulge in promiscuous intercourse, and are under no

restraint. They clothe themselves in skins and blankets, and, sound the cymbal and drum and conch, and cry aloud with hoarse voices; "We will hasten to delight, in thick forests and in pleasant places; we will feast and sport; and gathering on the high ways spring upon the travellers, and spoil, and scourge them." In *Śácála*, a female demon *(a Rácshaśi)* on the fourteenth day of the dark fortnight sings aloud "I will feast on the flesh of kine, and quaff the inebriating spirit, attended by fair and graceful females." The *Sudra*-like *Báhícas* have no institutes nor sacrifices, and neither Deities, *Manes*, nor Brahmans accept their offerings. They eat out of wooden or earthen plates, nor heed their being smeared with wine or viands, or licked by dogs, and they use equally in its various preparations the milk of ewes, of camels, and of asses. Who that has drank milk in the city *Yugandhara* can hope to enter *Swerga*. *Bahi* and *Hica* were the names of two fiends in the *Vipáśa* river; the *Báhícas* are their descendants, and not of the creation of *Brahmá:* some say the *Áraťťas* are the name of the people, and *Báhíca* of the waters. The Vedas are not known there, nor oblation, nor sacrifice, and the Gods will not partake their food. The *Prasthalas*, (perhaps borderers,) *Madras*, *Gandháras*, *Áraťťas*, *Khasas*, *Básas*, *Atisindhus*, (or those beyond the Indus) *Sauviras*, are all equally infamous. There one who is by birth a *Brahman*, becomes a *Cshetriya*, or a *Vaisya*, or a *Súdra*, or a *Barber*, and having been a Barber, becomes a Brahman again. A virtuous woman was once violated by *Áraťťa* ruffians, and she cursed the race, and their women have ever since been unchaste, on this account their heirs are their sister's children not their own. All countries have their laws and Gods: the *Yávanas* are wise, and preeminently brave: the *Mlechch'has* observe their own ritual, but the *Madracas* are worthless. *Madra* is the ordure of the earth: it is the region of ebriety, unchastity, robbery and murder: fie on the *Pánchanada* people! fie on the *Áraťťa* race!"—MAHABHÁRAT. KERŃA PARVA.

No. VII.

Of the Bauddha Religion in Cashmir.

THE passage in the text adverted to, page 23, requires a little consideration, both as to its meaning, and the chronological views to which it has already given rise. The text of the original runs thus:

ते तुरुष्काव्वयोद्भूता ऽपि पुण्याश्रया नृपाः। शुष्कक्षेत्रादिदेशेषु मठचैत्यादि चक्रिरे। प्राच्ये राज्यक्षणे तेषां प्रायकश्मीरमण्डलं। भोग्यमासे सवौद्धानां प्रव्रज्योज्जिततेजसां। ततो भगवतः शाक्यसिंहस्य पुरनिर्वृते। अस्मिन् सहलोकधातौ सार्द्धं वर्षशतं ह्यगात्। वोधिसत्वश्च देशे ऽस्मिन्नेकभूमीश्वरो ऽभूत्। स च नागार्जुनः श्रीमान् षडर्हत्वनसंश्रयो।

There are in this passage some obvious inaccuracies, and some compounds of a purport absolutely unknown to the most learned Brahmans. Taking it as it stood, it appeared to involve the position that the *Turushka* princes preceded *Sákya Sinha* by above a century and a half, and concluding the *Gautama* of the sixth century before the Christian æra to be intended, by the name *Sákya Sinha*, which is always enumerated as a synonime, the date of Gonerda the third was adjusted accordingly in the preceding pages and placed 640 B. C. an opportunity having subsequently occurred of consulting a Burma priest, and a man of some learning, on the subject, there appeared good grounds for revising the passage, and altering the results, in consequence of which several pages previously printed off have been cancelled, and it is only in the marginal dates of the first dynasty that any traces of the error have been suffered to remain. These are of comparative unimportance, and will be readily rectified by adverting to the table. We have now then to offer a translation of the passage, premising that the term *Puranirvrite* should be *Parinirvrite*, the sixth case of *Parinirvriti* or in PALI, *Parinibbuti*, the ordinary term used by the Bauddhas, to express

the final *Nirvritti* or emancipation of their *Buddhas* or Saints in its fullest sense. *Pari* being added as an intensitive prefix. The use of this and some other peculiar expressions, which are at present quite unintelligible to the ablest scholars among the Brahmans of Hindostan, but are familiar to the Rahans of the Burman empire, proves that *Calhana* the author of the Cashmirian history, or at least his guides, were well acquainted with the language, and probably, with the system, of the Bauddhas.

"They (*Hushca*, &c.) of *Turushca* descent, were Princes, asylums of virtue, and they founded Colleges, and planted sacred trees, in *Sushca* and other places. During the period of their reign the whole of Cashmir was the enjoyment of Bauddhas, eminent for austerity. After them, when 150 years had elapsed from the emancipation of the Lord SÁCYA SINHA in this essence of the world, a *Bodhisatwa* in this country named NÁGÁRJUNA, was *Bhumiswara* (Lord of the earth), and he was the asylum of the six *Árhatwas*."

As the prevalence of the Bauddhas and consequence of Nágárjuna, if not subverted, were at least checked in the ensuing reign of *Abhimanyu*, and as the passage expressly states that the circumstance occurred after the Turushka princes, the 150 years subsequent to *Sákya Sinha* must fall within the limits of *Abhimanyu's* reign: it is therefore necessary only to fix the date of *Sákya Sinha* to determine that of the several reigns occurring in this portion of our history.

In a late work, *Hamilton's Nepal*, it is asserted on the authority of local tradition, that "*Sácya Sinha*, the well-known apostle of the nations still attached to the Buddha faith, existed about the beginning of the Christian æra, he being considered the *fifth* Buddha Legislator, and distinct from Gautama, who lived in the sixth century before it." Whatever may be the accuracy of this opinion, it may be safely asserted, that it is diametrically opposed to the notions prevalent in all other regions, Brahmanical or Bauddha. In the lexicons of *Amera* and *Hemachandra*, *Sácya Sinha* occurs as a synonime of *Gautama*, *Saudodhani*, and *Mayádévišuta* or Gautama, the son of *Sudhodhana* and of *Mayádévi*. A similar string of *Pali*

synonimes is used by the priests of the Burma Empire *Sudhodani*-cha *Gotama*, *Sákyasiha*, tat'ha, *Sakyamuni* ch' *Adichheh bandhu cha*. The Bauddhas of Ceylon also consider the fifth Buddha whom they name *Maitri* as yet to come.—*As. Res.* vii. 32 and 414.

Sákya Sinha, as observed, is always identified with Gautama. The concurring traditions of the Bauddha nations establish the existence of that prince of *Magadha* in the middle of the sixth century before Christianity. There is little reason therefore to call that fact in question. It is very unaccountable however why Gautama should bear such a synonime as *Sákya Sinha*,* and no satisfactory explanation of the appellation has yet been traced: it is equally inexplicable also how a prince of central India, should have borne so prominent a share, in the introduction of a religious innovation, the earliest vestiges of which are so clearly referable to the North West of India, to Bactria or even to Tartary. That the Bauddha religion did not originate in Cashmir with *Sákya Sinha* is evident from the whole course of the history, and all tradition points to a period long antecedent to his, for the date of the invention and its author. At the same time *Kalhana*, well informed as he is in these respects, has evidently confounded the two periods, and hence assigned to *Sákya Sinha* a date corresponding to at least 1332 B. C. although apparently designating the person who flourished B. C. 542. We may therefore venture to correct his chronology with reference to this latter date, although until we can be satisfied that the *Sákya Sinha* of the North West was one individual with the *Gautama* of *Magadhá*, we cannot venture to attach any thing like certainty to this emendation. Some

* According to the *Burmáh* Bauddhas *Sákya* is the family name of GAUTAMA's ancestry. In the *Parájiká Attha Kathá* is a very curious account of the four *Sangáyanas* or Missions, by which the Bauddha religion was propagated to distant regions. The fourth was of a miscellaneous nature, and included both Ceylon and Cashmir, about 236 years it is said after the disappearance of GAUTAMA: a *Gátha* or text is cited on this subject which alludes to some legends, that appear not improbably connected with the statements of our history. Gantwa Kásmíra Gándháram, isi *Majjantiko* tadá; Duttha nágán pasáditwa moch éti bandhhaná bahuti. *Majjantika* then having proceeded to Kashmir and Gandhar, and subdued the evil Serpent genius, liberated numbers from bondage.

circumstances in favour of the date laid down are adverted to in the concluding observations, and we may here add, that there seems to be a strange connexion between the circumstances and dates of the Zerdushts of Persia and the Buddhas of India, which deserves a more particular investigation than we have hitherto had materials to undertake.

The passage relating to the prevalence of the Bauddha faith in Cashmir includes the mention of an individual, whose history is fully as obscure, if not as important as that of Buddha.

NÁGÁRJUNA as a *Bodhisatwa* (see note in page 21) may be either a religious or a secular character: he was probably the former, as a hierarch, the prototype of the modern *Lama* of Tibet; his other title however, *Bhumíswara* may mean a Prince, and has probably induced Mr. *Colebrooke* to translate the text generally thus:

"DÁMODARA was succeeded by three kings, of the race of *Turushca*, and they were followed by a *Bodhisatwa*, who wrested the empire from them by the aid of *Sácya Sinha*, and introduced the religion of Buddha into Cashmir. He reigned a hundred years, and was followed by ABHIMANYU.—*As. Res.* ix. 295.

In differing from Mr. *Colebrooke*, there is great probability of committing error, but in this case, the state of the Manuscripts, full of obscurities and mistakes, is a sufficient vindication of a difference of interpretation, and until we can ascertain what the reading of the original should be, we may alledge in support of the translation above preferred, the following considerations;

1. The ascendancy of the Bauddhas according to the original, continues some time after ABHIMANYU's accession, as well as the superintendance of NÁGÁRJUNA; he could not therefore have been at that time king of

Cashmir. तस्मिन्सवरे बौद्धा अपि प्रवलितं यतुः। नागार्जुनेन सुधिया बोधिसत्वेन पालिताः।

Their superiority is assigned also to argument, not to authority; ते वादिनः पराजित्य वादेन निखिलान् बुधान्। क्रियान्नीलपुराणोक्तानच्छिदन्नागमद्विषः।

"In that time (ABHIMANYU's reign,) the *Bauddhas*, cherished by the learned *Bodhisatwa*, NÁGÁRJUNA, maintained the ascendancy: they, the enemies of the Ágama *(Vedas,)* and disputatious, overcame all the wise men in argument, and demolished the practices, prescribed in the *Nila Puráña*."

2. That the *Raja Tarangiñi* does not mean to include NÁGÁRJUNA, amongst the kings of Cashmir, may be also inferred from his omission in ABULFAZL's lists, prepared, as those were no doubt, from correct copies, and by able Pundits, and corresponding exactly with the Sanscrit text in every other instance.

3. The length of NÁGÁRJUNA's supposed reign, 150 years, or in fact its specification at all in this part of the history, is also hostile to its occurrence, as precision in this respect, is affected by the author, only from the reign of GONERDA the third.

4. We have the authority of the *Vríhat Kat'há*, the author of which was a Cashmirian, and lived about the same time with CALHANA, for denying the title of king to NÁGÁRJUNA; his work is a compilation of fables, it is true, and his account of NÁGÁRJUNA is evidently consistent with that character; but it still may serve to shew in what light that personage was usually considered by the Hindus. In the 7th section of the book entitled *Retna prabhá Lambaca*, NÁGÁRJUNA, is called the minister of CHIRÁYU, king of *Chiraya pur;* a *Bodhisatwa;* a man of singular virtue and charity, and great medical and chemical knowledge. He allows his head to be cut off to save the king's life, whose days his knowledge of the elixir of immortality had preserved beyond the natural limits, and the enmity of whose son and

successor, he had consequently provoked: his death however being really brought about, observes the author, by the Deities, who could not bear his beginning to render men immortal: एवं नागार्जुनाख्यं मर्त्यानां मृत्युनाशनं। नसोऽदैवतैर्यात्वात्सापि मृत्युवशं गतः।

5. Whoever NÁGÁRJUNA might have been, he was undoubtedly once a person of great celebrity, for a large portion of the *Kali Yug*, or present age, 400,000 years yet to come, is denominated after him, the *Nágárjuníya Śaca* or æra: it is singular therefore that there seem to be few or no legends respecting him, and all are but little satisfactory. A *Tantra* named *Cacsha Puta* is ascribed to him, but his name does not occur in its pages. A work on medicine is named after him, and a *Canara* work the *Pujyapáda Charitra* makes mention of him, in a similar character as the *Vrihat Catha*, and alludes to him as possessing some magical means of perpetuating his existence, and transmuting ordinary substances to gold.

In none of these cases, except perhaps as the *Śacádhipa*, does he seem to be considered as a king.

No. VIII.

On the Ancient Names of Cashmir in Classical Writers.

IT is said in the original (see page 24) that in consequence of the excessive cold, the King resided six months in *Dárvábhisáradi* or in *Dárva*, *Abhisára* and other places; of a more temperate clime it may be presumed. *Dárva*, has not been identified, although the *Dárvas* are in the list of outcast tribes, and were no doubt a people bordering on Cashmir. *Abhisára* as well as *Dárva*, must be contiguous to *Cashmir*, and at the time mentioned, must have been a part of the same kingdom. It is sometimes used, (As. Res. viii. 340)

though not very accurately, as appears from the text, as a synonime of Cashmir, and in that sense it might have been employed by the ancients. *Strabo*, *Quintus Curtius*, *Diodorus Siculus*, and *Arrian*, with some varieties of nomenclature, mention, Biasarus or Abiosarus, Abisares or Abiasares, Embisares and Abissares, as a Prince, whose dominions lay to the north of the Punjab, confounding the name of the king with that of his country ; an error much to be regretted, as it deprives us of the possibility of verifying some of the Monarchs in the Sanscrit text. Abissares as he is called, was the neighbour and ally of *Porus*, but after the defeat of that Prince, he sent ambassadors to Alexander. His dominions lay immediately above the country between the Indus and Hydaspes, or Vitasta, the Behut or Jelum : it would have been more correctly placed between the Jelum and the Chinab or Acesines, but the difference is not very considerable. Abhisara as a part of Cashmir, of a milder temperature, is likely to have been the most southerly portion of it, or possibly a tract below the mountains, and approaching the level of the Punjab : a situation, which will correspond very nearly with the site of the Regio Abissari of the classical writers. Monsr. D'Anville finds an analogy to Abissares in Peshawer (Antiq. Geogr. 14). Major Rennell considers Ambisares as king of the Indian mountaineers, the predecessors of the Ghickers, who occupied the hilly tract immediately west of Cashmir (Memoir 109 and 122) and Tieffenthaler calls the Bisari les habitans des Montagnes de Jambou : either of the two first positions is sufficiently near, to what seems to be the truth. Although *Abhisára* appears in the text, in this place, as a part of Cashmir, yet in a subsequent portion of the history, it is mentioned as an independent state, and it might have held that rank at the time of *Alexander's* invasion : its interposition between the Greek invaders and Cashmir, and finally the southern deflection of *Alexander's* route, may explain why no notice was taken of that kingdom, in the details of that conqueror's marches, an omission which D'Anville justly regards as unaccountable, particularly as the country appears to have been known by its proper appellation to the Greek writers before the Macedonian invasion of Persia.

Herodotus (Thal. 102) describes the northern Indians as dwelling near a city which he names Caspatyrus, and again, (Melp. 44) he states that *Scylax* when sent by *Darius Hystaspes* to explore the mouth of the Indus, commenced his course from that city. That by *Caspatyrus* is meant *Cashmir* seems highly probable from the analogies both of name and locality.

1. With respect to the name, it is first to be observed, that there are very adequate grounds for a slight alteration, which will bring the resemblance to absolute identification, with what is asserted to have been, and most probably was, the origin of the term, Cashmir: this was derived, it is uniformly asserted by the oriental writers, from the colonization of the country by *Casyapa*, the first settlement or city being named after him *Casyapa pur* (कश्यपपुर) converted in ordinary pronunciation, into *Cashappur* or Caspapur, the latter of which forms, independent of the termination of the case, is the proper reading of the Greek text. Thus Stephanus Byzantinus has Κασπάπυρος πόλις Γανδαρικη, and Dodwell (De Peripli Scylacis ætate) considers this as the same with the Κασπαλύρος of Herodotus. Wesseling regards it also as a various reading of the same, and although he prefers retaining the latter, he assigns no reasons for the preference. D'Anville also concurs in considering the Kaspapyrus of Stephanus Byzantinus, and the Kaspatyrus of Herodotus, as the same, and it seems most likely therefore that the variety of reading is accidental, and originates with an error in the manuscript: as far therefore as a precise coincidence of name is a proof of identity, we have every reason to conclude, that the Kaspapyrus of the Greeks, is the Kasyapapur, or Cashmir, of the Hindus, which therefore was known by the original of its present denomination, as early as the reign of Darius Hystaspes, or above five centuries before the Christian æra.

2. The next question is as to the situation of *Caspapyrus*, according to the Greek authorities, and its correspondence with that of Cashmir, and here it must be admitted, there are some difficulties in the way of extreme precision. The general concurrence is satisfactory enough. *Herodotus* (Thal. 102) states it to be in the vicinity of the Northern Indians, and associates

it with Pactyaca; Ἄλλοι δε των Ινδῶν Κασπατύρω τε πόλι και τῇ Πακλυικῇ χώρῃ εἰσὶ πρόσερυι, πρός αρκτου τε κάι Βορέω ἀνεμου καλοικημένοι· τῶν ἄλλων Ινδῶν, ὅι Βακτρίοισι παραπλησιην ἔχεσι δίαιταν, and in the second, he in like manner connects it with Pactyaca ὁιδε ὁρμηθέντες εκ Κασπάτυρε τε πόλιος κὰι τῆς Πακλυικῆς γης. They (Scylax and his companions) setting out from the city Caspatyrus, and the country of Pactyaca, sailed, he proceeds to say, towards the east and rising sun into the ocean πρὸς ηω κὰι ηλίου ἀνάτολὰς ἐς θάλασσαν; a course, which with reference to its commencement in Cashmir, its progress down the Indus, and its termination in the Indian Ocean, is so far from being accurately described, as to have thrown a suspicion upon the voyage itself, and which consequently requires some examination.

We may infer from several passages in the text, that the limits of Cashmir were formerly by no means confined to the mountainous belt, which now incloses it, but comprehended other districts, to the south and west, amongst which was *Pakhlee* or *Pakholi*, the *Pactyica* of Herodotus, a tract immediately contiguous to Cashmir on the West, and lying towards the upper part of the navigable course of the Indus, and hence, as Major Rennell (Memoir of a Map of India, 146,) infers, the country from which Scylax set out to explore the course of the river. It is by no means necessary therefore to question the general accuracy of the account left us of the commencement of the voyage. Having embarked on the Indus, the course however should have been rather west than east, and this part of the narration is clearly erroneous: at the same time, as the navigators could only estimate their *southern* course with any thing like accuracy, and as they conceived themselves advancing upon the whole to regions lying farther east, than any yet known to them, the mistake was not unnatural, and need not affect the general credibility of the story. It is to be observed also that we have not the original narrative, and *Herodotus*, may have substituted the popular notion of the eastern course of the river to the sea, for the more correct account of the navigator himself: such is *Monsr. Larcher's* opinion and it seems well founded; "Herodote qui n' avait pas lu la relation de Scylax, et qui avoit entendu dire, qu' il avoit descendu l'Indus jusqu' a

la mer, s' imagina que cette mer etoit a l' est, parce que c' etoit l' opinion de son siecle. Dans un temps posterieur, Hipparque pretendit que l'embouchure De l' Indus etoit a l' est equinoctial." (Larcher. Histoire de Herodote. Melpomene, note 95). We may therefore safely conclude that the Caspatyrus known to the Persians and Greeks was at least part of the modern *Cashmir.*

In the progress of time the name had undergone some change, but the situation was perhaps more accurately known. Cashmir appears in Ptolemy as Καστηρια and is placed with great accuracy Ὑπὸ τας τȣ Βιδαςπȣ (the Vitasta or Jelum) καὶ τȣ Σονδάβαλ (Chandra-bhaga) και τȣ Ροαδιος (Ravi) πηγας the two first rivers actually rising within the present province, and the third on the confines of *Jambu,* once in all probability a part of Cashmir. Ptolemy has also a people called Καστειραιοι, one of whose cities Καστειρα lies lower down, and apparently corresponds with Multan (Vincent's Periplus, i. 12.) The Caspiræi however occupy the country as far as the Vindyan mountains, and the Yamuna. D'Anville appears to have considered these names alone, when he declares there is nothing in common with the Caspira of Ptolemy, and Caspatyrus of Herodotus, for as he justly observes the position of a city on the lower part of the course of the Hydaspes, ne peut convenir, a Cashmir: as mentioned above, however this is distinct from the *Casperia* which lies at the sources of the same river, and the position of which is precisely that of Cashmir. Whence Ptolemy got his *Casperia,* is not very clear. It is a singular geographical arrangement, that places the same people on the Hydaspes, at Modura or Muttra, and in the Vindyan mountains: the Caspiræi of Ptolemy seem to be the same as the Catheri of Diodorus, and the Cathir of Arrian, who were allied with the Malli and Oxydracæ or people of Multan, and Outch, against Alexander, or in a word the *Cshetryas* or Rajaputs of Western India—Hence perhaps the error he has committed in assigning such remote places to the same state, for in the Punjab, and Doab, the various cities he specifies, were no doubt governed by *Cshetriya,* or Rajaput princes, although they were not subjected to one common sway, nor constituted the territory of any one peculiar tribe.

II.

On the Diamond Mines of Southern India.

By H. W. VOYSEY, Esq.

HAVING lately visited some of the principal Diamond Mines of Southern India, the few facts I have been able to collect respecting the geological relations of that gem, I take the liberty of laying before the Asiatic Society.

A knowledge of the matrix of the Diamond has long been a desideratum in Mineralogy. It has been hitherto supposed that this mineral was only found in alluvial soil, and a late writer infers from some circumstances attending a particular Diamond, which had passed under his examination, that the matrix of this precious stone was neither a rock of igneous origin nor one of aqueous deposition,* "but that it probably originates like amber, "from the consolidation of perhaps vegetable matter, which gradually ac-"quires a crystalline form, by the influence of time, and the slow action of "corpuscular forces."

This reasoning may apply with justice to the particular specimens which have fallen under the observations of Dr. Brewster, but as it is fully ascertained, that Diamonds have for two centuries at least been found in *a rock*, generally supposed to owe its origin to deposition from water, the application will of course be limited to the case of Diamonds found in alluvial soil.

* See Quarterly Journal of Science and Art, Oct. 1820.

A considerable range of mountains called the Nalla Malla* (Blue Mountains?) lies between the 77° and 80° of East longitude. Their highest points are situated between Cummum, in the Cuddapah district, and Amrabad, a town in the province of Hyderabad North of the Kistna, and vary in height from 2000 to 3500 feet above the level of the Sea. The following barometrical† heights are taken from my own observations, the others are from trigonometrical calculations with which I have been favored by Colonel Lambton.

Trigonometrical heights above the level of the Sea.	Barometrical heights above the level of the Sea.	
3086 feet	3060 feet	Durgapah-condah, a hill station of Colonel Lambton.
	1767	Pass between Cummum and Nandial.
	1563	Temple of Sri Sailam.‡
	2520	Ruined Temples and Stone Tank S. E. of Sri Sailam, 5 miles.
3149	not visited,	Byramcondah, hill station of Colonel Lambton.
3055	not visited,	Cundah-Brahmeswar, hill station of Colonel Lambton.
	717	Town of Nandial.
	507	Town of Cuddapah.
	1000	Bed of the Kistnah at Moorcondah.

The outline of these mountains is flat and rounded, very rarely peaked, and as they run N. E. and S. W. the ranges gradually diminish in height, until in the former direction they unite with the sandstone and clay slate mountains of the Godavery near Palúnshah. Their union is cer-

* I have reason to believe that this name is merely local.

† The Barometer is a late contrivance of Sir Harry Englefield. It is called the Box Barometer and is refilled at every station with purified mercury. The cistern is of box-wood and open; with a gage an exact inch in height, which is adjusted by a lens at the time of observation. It differs but in a trifling degree from other barometers with which it has been compared, and I believe that its horary variations are more uniform. From the close correspondence usually observed between the trigonometrical and barometrical heights at many of Colonel Lambton's stations, I think the maximum of error is not more than 50 feet.

‡ Pagoda of Perwuttum described by Col. Mackenzie in the Asiatic Researches, vol. v.

tainly not very distinct, but is sufficiently so to entitle them to be considered geologically as the same range. In a southern and S. W. direction, they probably extend considerably beyond the Pagoda of Tripati. The most southern point that has fallen under my observation is Naggery Nose, a well known Sea mark on the coast of Coromandel. Travellers to Hyderabad make a considerable detour for the purpose of crossing these mountains in their most accessible parts. Among the western passes on the Cuddapah road are those of Bakrapet and Moorcondah on the bank of the Kistna, and those of Nakrikul and Warripalli on the Ongole road are among the eastern. The breadth of the range varies, but never exceeds 50 miles.

The geological structure of these mountains, it is difficult to understand, and it cannot be easily explained by either the Huttonian or Wernerian theories. The different rocks of which they are composed, being so mixed together without regard to order of position, each in its turn being uppermost, that it is not easy to give a name so definite as to apply in all places. I once thought the term " shistose formation" would be the most simple and untheoretical term, but as Clay slate is probably the most prevalent rock, I have determined on giving that name to the whole, observing however that by " Clay slate formation" I do not mean the Wernerian Thousheiffer, the fourth in order, of his enumeration of primary rocks, but merely a collection of rocks which I conceive to have been placed in their present situation at the same period of time.

The "Clay slate formation" then of the Nalla Malla Mountains consists of Clay slate; of every variety of slaty lime stone between pure lime stone and pure slate; of Quartz rock; of Sandstone; of Sandstone Breccia; of Flinty slate; of Hornstone slate and of a lime stone which I call Tuffaceous for want of a better name, containing imbedded in it, rounded and angular masses of all these rocks. All these vary so much in their composition, and pass into each other by such insensible gradations, as well as abrupt transition, as to defy arrangement and render a particular description useless.

It is bounded on all sides by Granite, which every where appears to pass under it and to form its basis.

Some parts detached from the main range such as Naggerry Nose, Worramallipet and Nandigaon, a town on the Hyderabad frontier, with many others, have only the upper third of their summits of Sandstone and Quartz rock; the basis or remaining two-thirds being of granite.*

This range of mountains is intersected by the rivers Kistna and Pennar and both appear to pass through gaps or fissures in it, which have been produced by some great convulsion, which at the same time that it formed the beds of these rivers, gave passage to the accumulated waters of some vast lakes situated near the outlets.

The tortuous passage of the Kistna for upwards of seventy miles is bounded by lofty and precipitous banks, which in some places rise to 1000 feet above its bed; the opposite sides of the chasm corresponding in an exact manner. Ravines of this description are not unfrequent all over the range, and the exact correspondence of their opposite salient and re-entering angles, together with the abruptness of their origin, totally preclude the supposition of their being hollowed out by the action of running water.

Two of these remarkable chasms occur on the western road to the shrine of Maha Deo at Sri Sailam, and would be totally impassable to travellers, but for the once magnificent causeway and steps, which wind down the precipice.

* I have reason to believe partly from personal observation, and from specimens obtained from other sources, that the basis of the whole peninsula is of granite.

I have traced it along the coast of Coromandel lying under *laterite* (Buchanan's name for the Iron Clay of Jamieson) from Pondicherry to Masulipatam.

From Rajahmundry to Nandair in the bed of the Godavery.

And I have specimens from the base of the Seetabaldi hills, Nagpoor. From Travancore, Tinnevelly, Salem and Bellary.

The only rock of this formation in which the diamond is found is the Sandstone Breccia. I have as yet only visited the rock mines of Banganpalli, a village situated about twelve miles west of the town of Nandiala. The low range of hills in which these mines are situated appear distinct from the main range, but a junction of the north and south extremities may be traced with great facility.

The Breccia is here found under a compact sandstone rock, differing in no respect from that which is found in other parts of the main range. It is composed of a beautiful mixture of red and yellow jasper, quartz, chalcedony and hornstone of various colours, cemented together by a quartz paste. It passes into a puddingstone composed of rounded pebbles of quartz hornstone, &c. cemented by an argillo-calcareous earth, of a loose friable texture, in which the diamonds are most frequently found.

Some writers have miscalled this rock amygdaloid or wacken, and have described these mines as being situated on conical summits of that rock. The truth is that the conical summits are artificial, and owe their origin to the sifting of the pounded Breccia and Puddingstone, for the purpose of separating the larger stones, preparatory to their being wetted and examined. The hill itself is quite flat and not a single conical elevation can be seen throughout its entire extent. In my journey from Nandiala on horseback, a view of the range for an extent of twenty miles N. and S. was constantly before me, and in no instance did I observe a deviation from the continued flatness.

I regret that for many years previous to my visit to these mines, no fresh excavations had been made, so that I had no opportunity of ascertaining the mode in which the miners get at the Breccia. I saw many holes under large blocks of Sandstone, of about five feet average depth, most of them blocked up by rubbish. I was told that at that depth the diamond bed was found.

The miners are now content to sift and examine the old rubbish of the mines, and they are the more bent on doing this, from an opinion which prevails among them, and which is also common to the searchers for Diamonds in Hindustan and to those on the banks of the Kistna, Parteala, Malavilly, &c. viz. that the diamond is always growing, and that the chips and small pieces rejected by former searchers, actually increase in size, and in process of time become large diamonds. I saw at the time of my visit in January, 1821, about a dozen parties at work, each composed of seven or eight people. Each party was on the top of one of the conical eminences, and actively employed in sifting and separating the dust from the larger stones: these were then laid in small heaps, spread out on a level surface, wetted, and examined, when the sun was not more than 45 degrees above the horizon. A party of boys was engaged in collecting and pounding scattered pieces of Breccia. All the labourers were *Dhérs* or outcasts, and under no controul or inspection. The misery of their appearance did not give favorable ideas of the productiveness of their labour.

The sandstone Breccia is frequently seen in all parts of these mountains at various depths from the surface. In one instance I observed at a depth of 50 feet, the upper strata, being Sandstone, Clayslate and Slaty limestone. The stratification of the whole face of the rock is here remarkably distinct, and may be traced through a semi-circular area of 400 yards diameter. The stratum of Breccia is two feet in thickness, and immediately above it lies a stratum of Puddingstone composed of Quartz and Hornstone pebbles, cemented by calc areous clay and grains of sand. It is very likely that this stratum would be found productive in diamonds, and I have no doubt, that those found at present in the bed of the Kistna, have been washed down from these their native beds, during the rainy season.* In the alluvial soil of the plains at the base of this range of mountains, and particu-

* Diamonds are found in the bed of the Godavery near Buddrachellum. The nullahs and small rivers which run into it near that place, have their origin in a rock formation exactly similar with those above described. I think it very probable that the Diamond mines of Sembhelpoor, of Pannah, and even of Bijapúr are situated near similar rocks.

larly on or near the banks of the rivers Kistna and Pennar, are situated the mines which have produced the largest diamonds in the world. Among them are the famous mines of Golcondah, so called from their being situated in the dominions of the sovereigns of Golcondah, although they are far distant from the hill fort of that name,—from which the province and Cooteb Shahi dynasty took their title. They were once very numerous (at least twenty in number), and Gani Parteala situated about three miles from the left bank of the Kistna, was the most famous. They are now with the exception of two or three, quite deserted, and the names of several of those mentioned by Tavernier are forgotten. In none have fresh excavations been dug for many years; although much ground remains unopened, and many spots might be pointed out for new and productive mines.

Even at Gani Parteala the search is confined to the rubbish of the old mines: at Atcúr, Chintapalli, Barthenypard and at Oustapalli, all situated within two or three miles of each other, there are no labourers.

The plain in which these villages are situated is bounded on all sides by granitic rocks, which also form its basis. The average depth of the alluvial soil is about twenty feet.* Its upper portion is composed of that peculiar black earth which is called by Europeans "Black cotton soil,"† and is identical with that found on the banks of the Kistna in other parts of its course; on the banks of the Godavery; of the Manjera; Baen-Gunga and in the plain of Nandiala, arising from the decomposition of the basaltic trap rocks, in which all these rivers or their tributary streams take their rise. Beneath this upper stratum, it is mixed with masses and rounded pebbles of Sandstone, Quartz Rock, Jasper, Flinty slate, Granite and

* The greatest extent of the alluvium from the river's bank is about six miles, and the change to the red and grey soil from the decomposition of the granitic rocks is very distinct.

† This soil is easily fusible before the blow pipe: in 1820 I exposed it in a covered crucible to little more than a red heat, and it was converted into a light porous lava; before the blow pipe it forms a vitreous globule.

large amorphous masses of a calcareous conglomerate, bearing no mark of attrition from the action of running water. In this stratum the diamond and other precious stones are found. The excavations are of various size, but from 15 to 20 feet deep.

The labourers are a little more under controul than at Banganpali and they pay a trifling duty to the Nizam's Agent stationed in the village. The mode of search is precisely the same as that above described.

The mines of Ovatampalli and of Canparti on the right and left banks of the Pennar near Cuddapet, are in an alluvial soil of nearly the same nature; it is not quite so black, from the greater admixture of debris of sandstone and clayslate.

In many parts of the plain of Nandiala, diamonds were formerly sought for, but the mines have for a long time ceased to be productive.

The failure of the mines of the Dekhin may perhaps be principally attributed to the cheapness and plenty of Brazil diamonds. Otherwise from the vast extent of the rock in which they are found in India, there are scarcely any limits to the search for them. It may be assumed then;

1st. That the matrix of the diamonds produced in southern India, is the Sandstone Breccia of the "Clay slate formation."

2d. That those found in alluvial soil are produced from the debris of the above rock, and have been brought thither by some torrent or deluge, which could alone have transported such large masses and pebbles from the parent rock, and that no modern or traditional inundation has reached to such an extent.

3d. That the diamonds found at present in the beds of the rivers are washed down by the annual rains.

It will be an interesting point to ascertain if the Diamonds of Hindustan can be traced to a similar rock. It may also be in the power of others more favorably situated than the writer, to ascertain, if there be any foundation for the vulgar opinion of the continual growth of the diamond. Dr. Brewster's opinion is rather in favour of it than otherwise. It is certain that in these hot climates crystallization goes on with wonderful rapidity, and I hope at some future period to produce undeniable proofs of the re-crystallization of Amethyst, Zeolite and Felspar, in alluvial soil.

III.

Some Account of the Country of Bhútán, by Kishen Kant Bose.

TRANSLATED BY D. SCOTT, Esq.

Extent and boundaries of the Country of Bhútán.

THE Country of Bhútán is bounded on the South by the territories of the Honourable Company and of the Raja of Cooch Behar; on the East and South by Asam, on the North by the Lhassa territories; by Mem, or the Lepha Country, on the west, and by Digurche on the North West. The country extends in length from East to West in some places 20 days, and in some parts 25 days journey; but is less in breadth, being from South to North from ten to fifteen days journey. The Bhútán terri-

tory is entirely mountainous except on the south, south west and eastern parts, where there is level land. The low lands if well cultivated are capable of producing a revenue of seven or eight lacs of rupees; but they are in general waste, and at present the whole revenue of Bhútán, including mol, and sayer, and all items of collection, does not probably amount to three lacks of rupees.

It is related by the people of Bhútán that to the North of Lhassa there is a country called Lenja, in which Lam Sapto, or the Dherma Raja formerly dwelt. From that place he went to Lhassa, and after residing there for some time he arrived at Púnakha in Bhútán, which was at that time ruled by a Raja of the Coch tribe. When the Dherma Raja arrived there he began to play upon a kind of pipe, made of a human thigh bone, and to act contrary to the observances of the Coch tribe, and to perform miracles, at which the Coch Raja was so terrified, that he disappeared with his whole family and servants under ground. The Dherma Raja finding the fort empty, went in and took possession, and having deprived of their cast all the followers and slaves of the Coch Raja, who remained above ground, he instructed them in his own religious faith and customs: their descendants still remain at Púnakha and form the cast or tribe called Thep. In this way the Dherma Raja got possession of Púnakha, but on consideration that the sins of his subjects are attributable to the ruler of a country, instead of setting himself on the throne, and exercising the Sovereign authority, he sent to Lhassa for a Tibetian, in order to secure possession of the country; and having made him his prime minister and called him the Deb Raja, he occupied himself entirely with the cares of religion and contemplation of the Deity. At that time the respective boundaries, tribute, and authority of the different Rajas or Governors of Bhútán were settled as they continue to this day, as will be more particularly detailed hereafter.

All the people of Bhútán considered the Dherma Raja as their spiri-

tual guide and incarnate Deity, and implicitly obeyed his orders. Some time after this, and shortly before the Dherma Raja's death, he directed that on the occurrence of that event, his dwelling house, refectory, and store rooms should be locked up, and that his slaves and wealth should be taken care of as before; that his body should not be burned, but having been fried in oil, that it should be put into a box, and that tea and rice and vegetables should be placed daily, at the hour of meals, near the box, whilst his followers should perform religious worship; by which means he should obtain the food, until after a time, he should be regenerated at Lhassa, and would again come to take possession of his country. After that, the Dherma Raja died, and in the course of time, the child of a poor man in Lhassa began to say, in the third year of his age, "I am the Dherma Raja, my country is Lúlúmba, or Bhútán; my house and property are there." On hearing this the Deb Raja sent people to make enquiry respecting the child. On their arrival at Lhassa they went to him, and having heard what he said, they acknowledged him as Dherma Raja; but on wishing to take him away, the ruler of Lhassa and the child's parents objected thereto, upon which the Deb Raja sent large presents of money, horses and goods to the ruler of Lhassa, and to the parents of the child, and brought away the latter into the country of Bhútán. On his arrival there certain articles were taken out of the store rooms of the deceased Dherma Raja, and being mixed with similar articles belonging to others, were shewn to the child, and he was asked which of the things were his. Upon this, the infant Dherma Raja recognized his former property, and as he also knew the slaves, it appeared that he was in reality the Dherma Raja, and he was accordingly seated with the usual religious observances and ceremonies on the throne. After that, he began to read the Sástras and to perform the ceremonies practised by the former Dherma Raja, and in the same manner being thus continually regenerated, the Dherma Rajas continue until the present day. The reigning Dherma Raja is according to some the tenth,* and according to others the eleventh; but none can tell exact-

* The Dherma Raja's succeeding to the Government at the age of three, the value of ten of their lives

ly, nor can they say how many years it is, since the first Dherma Raja came to Púnakha from Lenja. These particulars are contained in a Lamta or history of the Dherma Raja; but the only copies of it are in the hands of the reigning Dherma and Deb Rajas, and it is not procurable. The present Dherma Raja was not regenerated in Lhassa; the reason of which is as follows: previously to the death of the late Dherma Raja, the Deb Raja and other Counsellors of state, entreated the Dherma saying "You have hitherto been regenerated in Lhassa, and in bringing you here, a great expense is unnecessarily incurred." Upon which the Dherma replied, "I will become regenerated in the Shasheb caste, and in "Tongsa," and accordingly he re-appeared in Tongsa, and is of the Shasheb caste. In like manner as the Dherma Rajas at the age of three years declare their regeneration, other persons in Bhútán also at the same age make similar declarations, and if there is a wife or child or relation of the person in his former birth alive, they present something to the parents of the child, and carry him to a Gelum or monk who has forsaken the world, or to the Dherma Raja or some place of worship, and there make a Gelum of him. If no relation of the child in his former birth remain, his parents themselves make a Gelum of him, in the manner above described. Of this kind of Gelums 50 or 60 might be found, but before or after three years of age, none of them can recollect their former existence: in this manner also are regenerated the Lama of Lhassa, Gyú Rimbíchú, and the Lama of Digercha, Penjelam or Tesú Lama, and the ruler of Chake called Chakelam.

The Bhuteas consider the Dherma Raja as their spiritual guide, incarnate Deity, and Sovereign prince; but in respect to the internal Go-

lives will be about 350 years, and if from this we deduct the value of one life, on account of the advanced age of the first Dherma Raja, and the period which the reigning one has still to live, the remainder, 315 years, will approximate very nearly to the period when the present Cooch Behar Dynasty first appeared, the founder of which may have been the expelled Coch Raja. This is the 312th year of the Cooch Behar æra.—T.

vernment of the country or to its relations with any foreign states, he has no authority whatever: and with exception to spiritual and religious matters, the administration of the Government of the country is conducted by the Deb Raja, with the advice of the Korjis and Counsellors, and in some cases, with the concurrence of the Dherma Raja. From the cares of Government the Dherma Raja is almost entirely free, and he has no great number of attendants for purposes of state. According to the ancient custom he receives for his daily subsistence, 8 measures, or 4 lbs. of rice, his Zimpe receives 2 lbs. and the Gelums attached to his suite receive some 2 lbs. and some 1 lb. according to their rank. The Zinkaups or Messengers, and Sankaups or menial servants, and his male and female slaves to the number allowed by ancient custom, each receive 1 lb. of rice per diem: it is called in Bhútán clean rice, but is in fact half composed of that grain in the husk. Besides the above any person who is employed by the Dherma Raja on the public service, is paid from the public treasury by the Deb Raja. The Dherma Raja also receives something in the way of Nezzerana or offerings from the inferior chiefs, and he trades to some extent. These perquisites are under the controul of the Lam Zimpe or household steward, the Dherma himself remaining constantly employed in the performance of his religious duties. The Lam Zimpe exercises authority over the agents in trade, and the Zinkaups, and slaves, male and female, and other personal dependents of the Dherma Raja, and an officer called Zimpenum acts as Lam Zimpe's deputy, and takes care of the treasury and store rooms. About fifteen or twenty menials are employed in the service of the Dherma Raja, and besides them sixty Zinkaups* or Messengers remain in attendance at the gate-way, and forty Gelums are constantly in attendance, for the performance of the ceremonies of religion; the above constitute the whole of his personal attendants. The Dherma Raja possesses lands in the low country to the south of the hills, of the annual value of 7 or 8000 rupees, and trades with a capital of 25 or 30,000 rupees. On the appointment of any of the officers of state,

* Spelt Zingarba by the Bhoteas.

they proceed, after receiving their dress of honour from the Deb Raja, to the Dherma Raja, to whom they present an offering, and receive a handkerchief, or a piece of silk of three feet in length and two fingers breadth, which is tied about their necks; this they consider sacred, and to act as a preservative from danger. From this source the Dherma Raja may receive 2000 rupees per annum. When any of the Dherma Raja's servants obtain any public employment, they also present him with something additional, and when people die, he receives something at the funeral obsequies, or when any religious ceremony takes place; from both these sources he may derive about 2000 rupees annually. Besides the above income he possesses about one hundred and twenty-five tangans and mares, one hundred and fifty or two hundred cows and buffaloes, and a considerable sum of ready money. His expences are very considerable, as he is obliged to maintain all supernumerary Gelums and followers, exceeding the ancient establishment, from his private funds, and also to defray the expences of the religious ceremonies and charitable donations; so that little remains of his annual receipts. The Deb Raja has no authority over the Dherma Raja's people, and whatever is done by the Deb Raja is done with the advice or knowledge of the Kalan, who is one of the Counsellors invariably appointed by the Dherma Raja. If the Dherma Raja's people go to any Subah or Collector in the interior, they receive from them their food, but without the Deb Raja's orders they can neither demand food from the ryots, nor porters to carry their baggage. Lam Zimpe has under his orders twenty peons; in point of rank he is on an equality with the Deb Raja's Dewan.

The Deb Raja is the prime minister. The Dony is the Deb Raja's public Dewan; Kalan is a Counsellor who attends on the part of the Dherma Raja, and these two with Púnáb or Púna Zimpe, the Governor of Púnakha, and Thimpoab or Thimpu Zimpe the Governor of Tassisujon, are the four Chief Counsellors of state. Andipura Zimpe, the Governor of the Fort of Andipur, Paro Pilon the Governor of Paro, Tangso Pilon, the Governor of Tangso, and Tagna Pilo the ruler of Tagna, are also of the same rank; and without their concurrence the Deb Raja

can do nothing; they are equal in rank to the four Counsellors above mentioned, and the rulers of smaller districts, and the Soobahs of passes, are under their respective orders.

The Deb Raja or the prime minister is the principal organ of Government. He receives the customary tribute from the different Governors of districts, and having laid it up in the Government store-rooms, disburses the established charges of the state. He has however no authority to deviate in the smallest degree from the observance of established customs. The revenue which he receives from the country is expended in religious ceremonies, and in feeding the dependents of Government. The Deb Raja is entitled to six measures or three pounds of rice from the Government stores daily; his Zinkaups and Sankaups are also fed from the public stores, but receive no wages. His other perquisites are from six sources as follows:—

1st. When any person is appointed a Pilon or Zimpe, or to any office of state, they present something to the Deb Raja. 2ndly. He receives personally the whole revenue of the low land estates of Mynagúrí, &c. about 30,000 rupees per annum. 3dly. He trades with a capital of about 40,000 rupees. 4thly. He receives a fine in all cases of murder or homicide of 126 rupees from the offender. 5thly. He is entitled to the property of all servants of Government on their demise, unless they may have been dependents of the Dherma Raja, who in that case succeeds to their property. 6thly. He presents horses, silk, salt and hoes to the petty landholders and farmers, and receives much more than the value in return. By these means he collects money, and with the contents of the public store rooms, and the produce of his brood mares and cattle, he defrays the charges of the religious ceremonies, and the expence attending the manufacture and [illegible]tification of new images of the Deities, which are constantly going on in the palace. When the Deb Raja vacates his office he must leave to his successor, 500 rupees in cash in the treasury, 126 slaves, 120 horses, and the ensigns and appendages of state, and with the remainder of his wealth

he may retire wherever he pleases, but upon his death the reigning Deb Raja will be entitled to what he leaves.

The Deb Zimpe or the private Dewan of the Deb Raja, has an establishment of twenty Poes or fighting messengers; he superintends the trading and other concerns of the Deb Rajas, and is entitled to two pounds of rice per diem, and to certain perquisites on the appointments of the inferior Officers of Government, and in cases of homicide. The Deb Zimpe's Poes receive the same allowance as those of the four Counsellors or Karjís.

The Zimpenum is the steward of the household. The wardrobe, cash, jewels, and plate are under his charge; he has ten Poes or fighting messengers under his orders, and receives an allowance of one and a half pounds of rice, and a fee from persons visiting the Deb Raja. His rank is equal to that of the Dewans of the Subahs.

The Dony or public Dewan and Sheriff constantly attends the Deb Raja, and transacts the public business of Government. He has an establishment of twenty Poes, receives an allowance of two pounds of rice, a fee in cases of homicide, and a present for an appointment; he has about ten or twelve menials all armed.

The Goreba or Warden of the fort gate, has five Poes and is equal in rank to the Donchap.

The Donchap or Jemidar has under him ten Poes; he is the Deputy of the Dony and executes his orders; he receives an allowance of 1½lb. of rice, and his chief business is to go and inform the Dherma and Deb Rajas when the rice is boiled, and after receiving their orders to see that each person gets his proper share. Tabey is the chief of the Zinkaups, of whom 100 remain in atttendance on the Deb Raja. Tabey has ten Poes and an allowance of one and a half pounds of rice. The Zinkaups go to war, and on errands of trade and public business, and each receives one

pound of rice, and allowance of tea and spirits, and four pieces of cloth. Tapé is the head groom, he has five Poes and one hundred and fifty grooms under his orders. He has charge of the horses and receives one and a half pounds of rice.

Nep is the store-keeper of the rice.

Ch'hane has charge of the salt and groceries, and has three or four Poes, he receives one pound of rice.

Mané is the chief of the buttermen, and has three Poes and an allowance of one pound of rice.

Shané has charge of the larder, his attendants, &c. as above.

Thapé is the chief cook, he has twenty Poes, and receives one and a half pounds of rice.

Tongso is the chief Physician, he has four Poes, and receives two pounds of rice.

Labetui is the Bhútán Secretary, he has five Poes and two pounds of rice, he also receives something from the Subahs, and has altogether about 1,000 Rupees per annum.

Kaiti are the Bengal and Persian Secretaries. They get each two pounds of rice, and have each two Poes, and receive from the Subahs and Pilons about 1,000 rupees, and also something for causes and liberty in the low-lands.

Kalan is the Counsellor on the part of the Dherma Raja. He has twenty Poes; he assists at the council, and together with the other Counsellors tries cases of robbery, theft, and murder, &c. It is also his special duty to inform the Dherma Raja of all that is going on. He receives two pounds of rice, and some fees on suits.

Púna-ab or Púna Zimpe is the Governor of Púnakha fort. In the cold weather the Dherma and Deb Rajas live there for six months, the surrounding ryots are under Púna-ab and are all Bhúteas.—Púna-ab has nothing to do with the cultivators of the low-lands; under him are Leejee Zimpe and two other collectors, called Túmas of inferior rank. His jurisdiction extends in length two days journey from South to North, and somewhat less in breadth. Púnakha is the centre of it, and the whole can be seen from that place. Púna-ab collects from the ryots, rice, wood, wheat, and grass, according to custom, and having stored up these articles, serves them out to the Deb and Dherma Raja and their followers. In the month of P'halgun there is a religious ceremony called Dúngsu, at which the Pilons, and Zimpes attend, and pay the accustomed tribute to the Deb Raja; on that occasion all the ryots of Púnakha attend, and the Governor is required to feed the whole assembly. At that time a great council is held and persons appointed and removed from office. Púna Zimpe has many horses and cattle, and trades with a capital of 4 or 5000 rupees, he has a Zimpe, Zimpenum, Neb, Tui, and officers of different descriptions, the same as the Deb Raja has himself. He gets no revenue in cash and pays none, but feeds the court for six months, with the exception of thirteen days, during which time Andipura Zimpe is bound to furnish them with provisions. He tries all causes civil and criminal, except homicide, and his jurisdiction includes about a 32nd part of Bhútán.

Thimpu Zimpe is the Governor of the fort of Tassisujon or Tashizong; during the six months the court remains there he feeds the whole, and provides for the púja, &c. (in concurrence with the Deb Raja's officers.) His territory extends to the north, three days journey, and to the south, seven or eight. From east to west it is from one to three days journey in breadth. In this district there are under Thimpu, a Pilon, a Zimpe, a Jaddu, and five Túmas. Two days journey to the north there is a place called Gacha, the Pilon or Governor of which is tributary: there is a Túma at Wakha six coss to the South, a Pilon at Chipcha fifteen coss South West; and under him two

Túmas, his jurisdiction is three days journey in length and one in breadth. To the south of Chipcha three days journey, resides Pacha Jadu, or the Subah of Passakha or Bakhsha Dewar, and the low-land country to the south is under him. Thimpu Zimpe receives 800 Rupees from the Subah of Bakhsha Dewar, and from other places grain, &c. and he feeds the court for six months, and defrays the expence of the Chichu Púja, which takes place in Assin. On that occasion the whole of the Pilons and Subahs assemble, and hold a general council, and then the Deb Raja issues orders for the removal and appointment of the Officers of this description. Thimpu Zimpe trades to a greater extent than Púna-ab ; tries all civil and criminal causes, with the exception of cases of homicide, and assists at the trial of murder, and heinous offences, with the rest of the Counsellors of state. Thimpu Zimpe has officers under him of the same description as the Deb Raja himself.

Paro Pilo is the Governor of Paro and resides two days journey to the west of Tassisujon or Tashizong. He is an officer of great consequence and has under him Dali Zimpe or the governor of Dalimkote, the Júsha Zimpe or Subah of Timdú Dewar, the Chamorchi Jadu or Subah of that place, Duntum or the Subah of Lakhipur and Balla Dewar, and the Túma or Collector of Kyrauti who is under the Subah of Dalimkote. At Hapgang and Huldibarí, there are also Túmas, and three days journey to the North of Paro, at Pharee, on the borders of the Lhassa territory, he has a dependent Governor called Pharee Pilo. All these officers are under Paro Pilo's command, and deliver cash, grain, &c. to him, with the exception of the Subah of Dalimkote who maintains the garrison of Dalimkote and keeps the balance for military charges. There are many soldiers at Dalimkote who are always ready to fight, and the Governor being subject to Paro Pilo, the latter is on this account more powerful than the other Pilos. His territory extends twelve days journey from north to south, and is from six to eight days journey in breadth, he has under him six out of the eighteen Dwars or passes, and his jurisdiction includes one-fourth of Bhútán. He pays altogether in two instalments 3500 Rupees, and he decides all causes

civil and criminal except cases of homicide. Paro Pilo has officers under him of the same description as the Deb Raja himself.

Andipura Zimpe is Governor of the Fort of Andipur, which lies to the south of Púnakha about six coss distant. The territory under the control of this Governor extends one day's journey to the west, two coss to the north, two days journey to the east, and to the south-east fourteen days journey. In breadth it varies from one to two days journey. The Zimpe resides during the cold weather six months at Andipur, and six months in the hot weather at Khodakha. [Under him is Jhargaon Pilon, whose jurisdiction extends five or six coss to the north of Kistnyí, and the same distance south of Challa, and is in breadth from north-west to south-east, two and a half days journey. To the south of this division, which is thinly inhabited, the jurisdiction of the Cherang Subah commences and his authority extends to Sidli and Bijni. In the cold weather he lives at Bíssur Sing, and in the hot weather at Cherang. Andipura Zimpe has only this one Dwar, and at Kochubari, Bijni, and Sidli, Leshkers, and five or six Bhúteas reside on his part. He has about 3-32 parts of the country. He pays altogether about 1000 rupees, and is bound to entertain the court three days on their journey to Púnakha and ten days after the Dongsu púja. He decides all causes not involving homicide. Andipura Zimpe has officers under him of the same description as those already mentioned, as attached to the suite of the Deb Raja.

Tagna Pilo's jurisdiction lies between Bakhsha and Cherang. He has two Dwars or passes, and the Refu Jadu and two Túmas are under his orders. His territory is eight days journey long, and four days from east to west. He pays altogether annually in two instalments about 3000 rupees, and rules about 3-16ths of the country.

Tangso Pilo resides at Tangso six days journey east of Púnakha. His territory is twelve days journey long from south to north, and eight days broad.

He rules 9-32 of the country and has eight Dwars, and six Zimpes or inferior officers under his orders, viz. Bagdwar, or Burra Bijnu, Kundu, or P'hulguri ruled by Jonga Zimpe. Dunsakkha to which is attached the low-land of Pusakha and Arritti: Tongsi gang, to which is attached Kalin Dwar called Hapdwar in the low-land; Rotu with Chinka Dwar, Gúrgúma ruled by Radi Zimpe and Kyabari; and besides these he has authority over four Zimpes in the hills, and he also has under him Officers of the same description as the Deb Raja. 31-32d parts of Bhútán in point of extent are in this way in the hands of the Pilos, Zumpes, &c. the Deb Raja holding Khas 1-64th part, and the Dherma Raja about the same, or 1-32 of the whole country between them. Tangso Pilo pays altogether about 3500 or 4000, and some articles of different kinds.

The fort of Púnakha is situated between two rivers just above their junction. To the west of it upon a hill there is another fort distant about two coss. At Andipur there is also a fort situated above the junction of the same river that flows past Púnakha with another stream falling into it from the eastward; the former is called the Púshú, and the latter the Múshú. At Dosím there is a fort on the south side of a river. At Tassisujon there is a fort on the west bank of the Chanshú. To the west of Tassisujon within half a coss there are two forts on the same hill. At Paragang there is a fort and also at Tangso and Tagna. These are the chief forts in the country, but the inferior officers have also at their residences, squares, surrounded on four sides with stone walls. The above Pilos have the largest garrisons, as they live all the year round at the same place.

To the north-west of Tassisujon and to the west there are two forts; the first called Desíphúta, which are inhabited by a few officiating Priests and Gelums. When the court is at Tassisujon, if the weather happen to become uncommonly warm, they go up to Desíphúta. The fort of Tassisujon remains empty during the cold weather. At that season from the month of Assin to Bysakh, all round the above forts, and as far as Chipcha, the country on both sides of the river is covered with snow, and the

cold is so excessive, that the snow lies from one to three feet deep, on the tops of the houses. The people who remain to watch the houses cannot live without fires, and they also wear four or five dresses, one above another, and night and day drink tea and wine. On account of the cold, many of the inhabitants desert the country at this season, and repair to the low country on the banks of the Púnakha and Andipur river. Most of the farmers have two houses, and two farms, one of which they cultivate during the hot, and the other during the cold weather. On the banks of the Andipur river as far as Jhargaon, in Jeyte, the heat of the sun is excessive; at that time the court and many of the ryots leave Púnakha and return to Tassisujon. At Púnakha if the weather is too hot, the court goes up to the northern fort, and at Tassisujon, if it is too cold, they go to Dosím. The walls of the forts are built of stone, laid in clay, and the houses are roofed with planks laid upon one another, and secured without fastenings of any kind, merely by placing a number of heavy stones upon them. The small gates of the forts are made of wood, and the great gates are plated with iron. The walls of the forts of Tassisujon and Púnakha may be 30 feet high; in the middle of each of them there is a very lofty building, (at Tassisujon it is six or seven stories high) in which the Dherma Raja lives, and it is surrounded with smaller buildings for the accommodation of the Deb Raja, and the officers of government. The walls are pierced with loop holes for the discharge of musketry and arrows, and the gates are upon an ascent, and very difficult of access. The Zinkaups and Poes of the offices of Government, reside at the door of the sleeping apartments of their immediate superior, and their room is hung round with arms. There are bazars at Paragang, Tassisujon, and Púnakha, where are sold dry fish, tea, butter, coarse cloth, pān, betle and vegetables, but rice, pulse, earthern pots, oil, salt, pepper, turmeric are not procurable. At Tassisujon fort there are 500 Gelums and about 500 Zinkaups, Poes, &c. In Tangso and Paragang about 700, at Andipur 400, and at Tagna 500; altogether the whole of the population able to bear arms does not probably exceed 10,000.

The Bhúteas have match-locks, but they are of little use, as they cannot

hit a mark with a ball. They are afraid to fire a matchlock with more than two fingers of powder, and when they load more heavily they tie the piece to a tree, and discharge it from a distance. They are good archers, and their arrows discharged from a height go to a great distance ; they also fight well with a knife. When they fight with a Deb Raja, or the Pilos amongst themselves, they stand at a distance, and fire arrows at each other, and if one of them is killed both parties rush forward, and struggle for the dead body; whichever of them may succeed in getting it, they take out the liver, and eat it with butter and sugar; they also mix the fat and blood with turpentine, and making candles thereof, burn them before the shrine of the deity. The bones of persons killed in war are also used for making musical pipes, and of the skulls they make beads, and also keep them set in silver, for sipping water, at the time of the performance of religious ceremonies. When a person is killed in their squabbles, the Gelums usually interfere, and make peace between the parties. The intestine broils which so frequently occur in Bhútán are usually occasioned, either by the Deb Raja doing something contrary to custom, or by his remaining too long in his office; in which cases the Zimpes, Pilos, &c. assemble and require him to resign, and in the event of refusal a battle ensues. If the Deb Raja resigns, or is defeated, the assembly, with the consent of the Dherma Raja, chuse some one of themselves to succeed him, of the Sha or Waa tribe, and who has already attained the dignity either of Zimpe or Pilo. These battles always take place at the annual púja in Assin and P'halgun. If there is no person in the assembly fit for the office of the Deb Raja, they select a Gelum, and if there is no fit person of that class, or if they cannot settle the matter amicably amongst themselves, they send to Lhassa for one.

The Bhúteas do not fight in an open manner, but fire at one another from a distance, and attack at night, or lie in ambuscade. They wear iron caps and coats of mail, of iron, or quilted jackets; they are armed with four or five knives in case of accidents, and they carry bows and arrows: before engaging they drink plentifully of fermented liquor: the Deb Raja

himself leads them to battle, and in case of war all the ryots of the country assemble to fight : on such occasions they maintain themselves, and the women attend to carry the eatables and baggage. All the inhabitants are always armed, the men wearing long knives and the women smaller ones.

An unregenerated person may become a Gelum, at any time between the 5th and 10th years of his age, but not before or afterwards. The parents of the child, of their own accord, appear before the Dherma Raja or the Deb Raja, or before some Officer of Government, or a Gelum, and present the child, along with some money, requesting that he may be admitted into orders. The child's clothes are then taken off, and he is invested with a coat of a red colour and a piece of cloth is put round his neck ; his parents have no longer any thing to do with his support, and the Gelums feed him and teach him to pray and to read the holy books. The Gelums renounce all connection with women, and the cultivation of the ground, but they may trade or serve the Government. If any of them trespass in regard to women, they are expelled from the society, and not allowed to perform the ceremonies of religion. If any of them chuse voluntarily to resign, he calls out aloud in the midst of the assembled brotherhood " Dúm shobdaí," or my covering has fallen off ; and flies from their presence, but is permitted to take with him any property that he may have accumulated. The Gelums are bound to perform religious worship in public, and also for private individuals ; to read the holy books and to burn the dead. The chief of the Gelums is called Lamkhem. He is next in rank to the Dherma Raja, and when the latter dies the Lamkhem performs the funeral obsequies, and commands in spiritual matters during the interegnum, and the minority of the next Dherma Raja, whom he instructs in the religious ceremonies and sacred books. It is consequently a very high office. Under the Lamkhem there is a deputy called the Lam Omje who in case of the Lamkhem's death performs the duties of the office, and is usually appointed his successor by the Dherma Raja, in concurrence with a council of elders of the class of Gelums, to which body the Deb Raja, the four chief Counsellors, and the three Pilos always belong. Under the Lam Omje are ten or

twelve Lubi or inferior Gelums for teaching, singing, reading, &c. to the boys. There are five hundred Gelums at Tassisujon and Púnakha, three hundred at Paragang, three hundred at Tangso, two hundred and fifty at Tagna, two hundred at Andipur, and one or two at each of the stations of inferior officers, supposed to be about three hundred, making altogether about two thousand. There also reside separately in Gimpas or convents and as servants three thousand one hundred and fifty, making altogether five thousand Gelums under the guidance of Lamkhem. The convents are chiefly founded by Deb Debas or Deb Rajas who have resigned the office or other retired officers of state. All Gelums that live with the court, or with the officers of Government, are fed by the Government, while those who live in convents support themselves ; but when the Government distributes charity, all the Gelums are entitled to a share. When any rich Gelum dies a part of his property goes to the Government, either to the Deb Raja or Dherma Raja, as he may have been a dependent of them respectively, and the remainder is divided amongst his brethren ; that is to say, if the deceased was in the service of Government, the Deb Raja gets his estate, and if he was a mere Gelum, the Dherma Raja and Lamkhem will take it. When charity is distributed, a Gelum who has been twice born or regenerated in the manner above-mentioned, receives a double portion, and a treble, if he has been thrice born. Gelums cannot bear arms, unless they are in the service of government, but they may have a small knife for culinary purposes : they are not permitted to sleep, or even to lie down ; night and day persons of the order continually keep watch over them, armed with long whips, which they apply to the shoulders of any one that is seen to nod : they are not allowed to go out of the fort without the orders of Lamkhem, and of the Dherma and Deb Rajas, except on the days when they go in procession to bathe in the river. On these occasions, they are preceded by musicians, and persons burning incense : next to them marches the Lamkhem, and after him the Gelums in single files according to their seniority, when they all proceed to bathe in the same order. The Gelums called Lubi bathe separately from the others. There are also convents of women who wear yellow clothes, and make vows of

chastity. They have each their own superior and are under the control of Lamkhem.

Bhútán produces abundance of tangan horses, blankets, walnuts, musk, chowris or cow tails, oranges and manjíth (madder) which the inhabitants sell at Rungpore ; and thence take back woollen cloth, pattus, indigo, sandal, red sandal, assafœtida, nutmegs, cloves, nakhí, and coarse cotton cloths, of which they use a part in Bhútán and send the rest to Lhassa, and from the latter country they import tea, silver, gold and embroidered silk goods. In Lhassa there is no rice produced, and little grain of any kind, on which account rice, parched rice, wheat, and flour of dhemsi are also exported from Bhútán to that country. The tea, the Bhúteas consume themselves; the greater part of the silk goods, for clothing and hangings in their temples; and with the silver they mix lead, and coin it into Narainy rupees. The Bhúteas also send the same sort of goods as they export to Rungpore, to Nepal and Assam, and to the former country they likewise export rock-salt. From the low-lands under the hills and on the borders of Rungpore and Cooch Behar, they import swine, cattle, pān and betle, tobacco, dried fish, and coarse cotton cloth. Besides the Officers of Government and their servants, no person can trade with a foreign country, nor can any of the inhabitants sell tangan mares without the Deb Raja's permission. All horses and blankets are monopolized at a low price by the officer in whose jurisdiction they are produced.

In Bhútán the grains produced are rice, wheat, dhemsi, barley, mustard, chenna, murwa, and Indian corn. The rice is planted out in Assar, and ripens in Ashin or the beginning of Kartik. The other grains are sown in Kartik and reaped in Jeyt. The sloping sides of the hills are cut into stages, and the rice watered from rivulets which are made to overflow the different beds successively. All sorts of fruit ripen between June and October. The fruits are walnuts, apples, peaches, oranges, pomegranates, chouli, limes, melons, &c. There is one mango tree at Púnakha and one at An-

dipur, both of which bear, but the fruit is bad, and sells for an extravagant price: it ripens in the month of Ashin or September. There is one jack tree at Jhargaon and two date trees in all Bhútán. Near Andipur sugar-cane is cultivated: radishes and turnips are very plentiful: the latter weighs 10 or 12 pounds. The women perform all the agricultural labor except the work of ploughing.

In Bhútán there are fifteen tribes, the chief of which are those of Sha and Waa. The Deb Rajas and also the principal officers of state used always to be of these castes; but the present Deb Raja, on account of his abilities, obtained that office although a Parab. The tribe of Sha, inhabit the country about Andipur; the Waa, that about Tassisujon and Wakha; the Parab, Paragaon; Shasheb, Tangso; and the Togab, Togna. Besides these five, which are the principal tribes, there are the following castes: Gen, Kapi, Thowzeb which are all of inferior rank; they live in the mountains to the north of Púnakha and Tassisujon and are the herdsmen of the chowr-tailed cattle. The caste of Pewa sell pān, betle and spirits, and the women are prostitutes. The caste of Zongsob are all menials or slaves. Both these castes live about Tassisujon, Púnakha and Andipur, and no where else. The son of a Bhútea and a Coch parent is called Thep. The Toto tribe live in Lakhipur, the Dahya in Chamorchí, the Bagbora, and Ole in Cherang; the whole of these castes repeat the sacred words "Om mani peme hún" and revere the Dherma Raja, as an incarnation of the Deity. Besides the above, there are Coch, Rajbansi, Moosulmans and other tribes in the low-lands, all of whom profess their peculiar faith, and follow its customs without molestation.

The Bhúteas worship images and consider the Dherma Raja as a God. They will not kill any animal even for food, but will eat carrion, or what has been killed by any other person. They eat the flesh of every sort of animal except that of the pigeon; but if any one should eat even that, he will not lose caste, but will merely be exposed to ridicule. All classes from boyhood to old age repeat this one mantra "Om mani peme

hún." They consider Owanchu as the supreme Deity. Laberem búche, a deity whose image they worship, resembles exactly that of Ram of the Hindoos. Cheraji resembles Krishna. Dawjitan is the same as Jagannat'h, but his image was not seen. Amsumem is said to resemble the Hindoo Chendi; the above are benevolent deities. Gonjulea's image was not seen: he was said to be malevolent. Besides these there are innumerable images, sitting in the posture of a jogi, with four hands held up. The images of the deities are kept in the apartments of the Dherma Raja, the Deb Raja, and the Officers of Government. The people of the country often walk round the buildings containing the images, repeating the words "Om mani peme hún." There are also erected in many places stone walls called Chutí, of four or five cubits high and indefinite length, upon which the above words are inscribed, and the people in like manner walk round them, repeating the same. They also put up flags with the above words inscribed upon them, and every person passing the place ought to put up another; but poor people merely attach a rag of two or three inches long, and half an inch broad to the pole of the first flag. The Bhúteas do not bathe before meals, but repeat the words "Om mani peme hún." Four times a month the Gelums abstain from fish or flesh, viz. on the 8th, 14th, 24th, and 30th of the moon. Some only observe the fast once a month. The Gelums are forbidden to use wine, but drink it secretly. The chief maxim of religious faith amongst the Bhúteas is that of sparing the life of all animals. The fish in the rivers they do not allow any one to kill; the lice and fleas that infest their heads and clothes, they catch and throw away; bugs they treat in the same manner, and never put any kind of animal to death. The religion of the Bhúteas assimilates in some points with that of the Hindus; they worship the images of the Deities, count their beads at prayers, and offer clarified butter to the gods by throwing it on the fire: they also resemble in their prejudices against taking away the life of animals, the same as our byragis, only that the latter refrain from eating the flesh of an animal, as well as from killing it. They resemble the Bauddhists in of-

fering no bloody sacrifices, and in not bending their heads before the image of any God, saying that the Deity pervades all nature and consequently their heads, which it is therefore unbecoming to bow before an image. They eat flesh, drink wine, and make beads of the skulls of men, in the manner of our sect of Beers. They are not Moosulmans, but rather approximate in their opinions to the Hindus of the above sect, who have relinquished the observances of caste and diet. The respectable people are continually repeating their mantra and performing religious ceremonies. The image of Labberembuchè resembles that of Ram; his countenance is similar, and he holds in his hands a bow and arrow; the Bhútán deity is however made of copper and gilt. There are also many images of deities with four arms, the manufacture of which is constantly going on in the palace, and together with the subsequent ceremonies, occasion the chief expence of the Government. The same sort of articles is not offered to all of their deities: some are presented with the heads of dried fish and fermented liquor; some receive fruits and rice, while others receive tea, and Loo is presented with pork, and with the head of an ox, which is burnt, and the horns put up in front of the house.

When a child is born it is first washed with warm water; after that, the next morning, it is carried to the river and plunged into the water, however cold the weather may be: there it is kept some time and after that its mother is bathed and the child wrapped up and carried home. Marriages are contracts by agreement of the parties, and no ceremonies are observed at their celebration; for the most part the husbands live in the houses of their wives, the latter seldom going to their husband's house. A rich man may keep as many wives as he can maintain, and when poor, three or four brothers club together, and keep one wife amongst them. The children of such a connection call the eldest husband, father, and the others, uncles. It is not considered as any crime for a man to have connection with any of his female relations except his mother; but it is looked upon as discreditable in the case of a sister or daughter. Almost all the women prostitute themselves until they are 25 or 30 years of age when they take a husband. Old

women are frequently united in marriage to boys, in which case the husband usually takes the daughter of his old wife after her demise. If the husband be much older than his wife, he calls her daughter, and mother, if much younger. When a person dies, a Gelum is sent for who burns the body. The bodies of persons dying of the small pox are first buried for three days, and if of any other disease, kept in the house for the same period after death, and then burned. In the case of persons of consequence there is an assembly of many people, and apparently rejoicing, with much drinking of spirits and feasting. During three days that the body is kept, the usual allowance of food is placed beside it, and this is the perquisite of the officiating Gelum. There are two places built with stones, one near Tassisujon, and another at Púnakha, called Tútína, where all dead bodies are burned. The ashes after incineration are collected, and carried home, and in the morning they are placed in a brass pot, and covered with silk, and attended by a procession carried to the river, where the contents are thrown into the water, and the pot and silk presented to the Gelums. At the same time a part of the wealth of the deceased is given in charity to the Gelums, and they are fed with rice and tea, and one or more flags with the mystic words "Om mani peme hún" inscribed upon them, are put up at the house of the deceased, as a means of accelerating his regeneration.

In Bhútán lightning does not descend from the clouds as in Bengal, but rises from earth, this was not actually seen, but the holes in the earth were inspected, and it is universally reported to be the case by the inhabitants. In Bhútán it never thunders, nor do the clouds ever appear of a black color, but merely resemble mist; the rain which falls is also exceedingly fine, like our mist. At Andipur and Púnakha there is sunshine all the year, but in other places a thick fog mitigates the ardor of the suns rays; which is probably occasioned by the comparative lowness of the situation of these two places. At Andipur on account of the mountains, the sun is not seen for the first and last pahars of the day. Snow falls only occasionally at Andipur and Púnakha, but every year in the other parts of the country.

The Bhúteas all live by their own labour, no one depending for support upon his relations. They have no objection to any sort of work, except killing hogs or other animals, which is performed by a person of mean caste called P'hapchemí who is a slave. The chief employments followed by the men are those of cultivating the ground or keeping shops; there are also potters, blacksmiths and carpenters. The potters do not use the wheel. The blacksmith works like those in Bengal, but the carpenter has no saw, and performs all his work with an adze and chissel. There are no barbers or washermen, every one performing their offices for himself.

The Bhúteas enjoy the revenues of their country by mutual concurrence in the following manner: They first become Zinkaups or Poes, then Túmas, then Zumpes under the Pilos or other officers, after that Iodus or Subahs of Papes, after that Zimpe, then Pilo, and at length they may become Deb Raja. The last Deb Raja was in fact originally a Zinkaup. If a man however possess extraordinary abilities or interest, he may get on more quickly and become at once a Zimpe from being a Zinkaup. Where a person gets a good appointment he is not allowed to keep it long, but at the annual religious festivals frequent removals and appointments take place. The Deb Raja himself after a time is liable to be thrust out, on some such a pretence, as that of his having infringed established customs; and unless he have either Tongso or Paro Pilo on his side, he must, if required to do so, resign his place, or risk the result of a civil war: on this account the Deb Raja strives by removals, and changes at the annual festivals, to fill the principal offices with persons devoted to his interest. The Bhúteas are full of fraud and intrigue, and would not scruple to murder their own father or brother to serve their interest; but what is wonderful, is, that the slaves are most faithful and obedient to their masters, and are ready to sacrifice their limbs or lives in their service; while their masters on the other hand, use them most cruelly, often inflicting upon them horrid punishments and frequently mutilating them.

No complaints for assaults and slight wounding or adultery are heard,

If a man catch another in adultery with his wife he may kill him without scruple, but if under other circumstances, a man kill another, he must pay 126 rupees to the Deb Raja, and something to the other Counsellors and to the heirs of the deceased. If he cannot pay this sum, he is tied to the dead body, and thrown into the river. No distinction is made between what is called murder and manslaughter in English law. In cases of robbery and theft, the property of the criminal is seized, and he is confined for six months or a year, after which he is sold as a slave, and all his relations are liable to the same punishment. There is no burglary or dakoity in houses in Bhútán, and robberies take place upon the highway ; the ryots having nothing in their houses for dakoits to carry away.

The practice of the courts is that if a man complains, he can never obtain justice, but he may be subject to a fine if he fails to establish his claim. If a merchant has a demand against any one, and can by no means get paid, he can only go to the Deb Raja, or some other judge, and say, " such a man owes me so much; pray collect the amount, and use it as your own." The defendant is then summoned, and if the demand is proved to be just, the money is realized for the use of the judge, who on the other hand, if the claim is not established, takes the amount demanded, from the plaintiff.

Whenever any ryot, or landholder, or servant, has collected a little money, the Officer of Government under whose authority they happen to be placed, finds some plea or other for taking the whole. On this account the ryots are afraid to put on good clothes, or to eat and drink according to their inclination, lest they should excite the avarice of their rulers. Notwithstanding this, the latter leave nothing to the ryots, but the Gelums are often possessed of wealth, which they collect as charity, and fees of office, and by trade. Whoever borrows money from a Gelum, considering him as a revered person, pays back more than he borrowed, and if they complain to the judge, they get the sum lent with interest, if their claim is proved, and if not, they are not subject to any fine ; the servants of Government are

also favored in like manner by the courts. In all ways the ryots are harrassed; whatever rice they grow, is taken almost entirely for revenue by the Government, and they are also obliged to deliver the grass and straw. Of wheat they retain a larger portion, and they do not give to Government any part of their dhemsi. All the colts that are produced from their mares, and all the blankets they make are also taken by the Officers of Government at a low price. They are also bound to furnish fire-wood, spirits, and grain for the Government Officers, and the husks and straw for the cattle, and are further obliged to carry all the bales of goods in which the Officers of Government trade gratis. For exemption from the last grievance, those who can afford it, pay something to the Deb Raja, which of course renders it still more burdensome on those who cannot do the same.

Sál, Saral, Sisu, Gambori and Sida trees are produced in the lowland, and small hills, for two days journey. On the interior hills, nothing but fir trees are to be seen: the wood is used for fuel and all other domestic purposes, and as it is full of resin it also serves for lamps.

There was formerly no mint in Bhútán, but when the Bhúteas carried away the late Raja of Cooch Behar, they got hold of the dies, with which they still stamp Narainy rupees. Every new Deb Raja puts a mark upon the rupees of his coinage, and alters the weight. The Dherma Raja also coins rupees, and besides them, no one else is permitted to put their mark upon the rupees, but there are mints at Paro, Tangso, and Tagna.

Route from Bijni to Andipur in Bhútán.

TO the north of Gowal-para lies Bijni, the residence of Ballit Narain. To the west of Bijni, nine coss, is Bísjora or Bírjorra, situated on the confines of the Company's territories, in the purgunnah of Khuntaghat. Half a coss north of this place the Bhútán territories commence with the Zemindari of Sidli. Three coss west from Bijni, we crossed the Ayi

river, it is about eighty yards broad and fordable except in the rainy season. To the north-west of Bisjorra lies Sidli, distant six coss, the residence of Súraj Narain, Raja of that Zemindari. The intermediate country is covered with long grass, with a few huts here and there, which are not observable until the traveller is close upon them. The jungle is very high, but there is a track or footpath as far as Sidli. From Sidli to the Northern hills there is no road in the rainy season, or from Bysakh to Kartik : in the month of Assin the jungle begins to be burned, and after this operation has been repeated several times, the road is cleared. The passage through this jungle is attended with innumerable inconveniencies of which the following are some. From Bijni to the hills, the whole country is covered with a species of reed called *Khagrah*, interspersed here and there, with forest trees. The jungle is of such height that an elephant or rhinoceros cannot be seen in it when standing up, and it is so full of leeches that a person cannot move a hundred yards, without having his body wherever it has been scratched by the grass, covered with these animals ; so that a single person cannot get rid of them without assistance. In this jungle, when the sun shines, the heat is intolerable, and when the sun ceases to shine, a person cannot remain in it without a fire, on account of the innumerable musquitoes and other insects with which it is filled. When the sun shines they retire, but in the evening and morning, and all night, men and cattle are tormented by them, and they are only to be dispersed by the smoke of a fire. In this jungle there are tygers, bears, elephants, rhinoceroses, buffaloes, monkies, wild hogs, deer, &c. but from nine o'clock in the morning until three in the afternoon, they keep in the jungle, and are seldom seen except in the morning and evening. To the north of Sidli six coss, lies the village of Bengtolli ; between these places there is nothing but jungle, and at Bengtolli there are only four or five families. To the north-west of Bengtolli lies Thannah Gendagram. There is here a party of Bhúteas but no village, nor are there any houses on the road ; the same sort of jungle continues, but begins at Bengtolli to be interspersed more thickly with Sal trees. Just before arriving at Gendagram, we crossed the new and old Bhúr rivers about eighty yards broad, and fordable, except in the rains. To the north-west

of Gendagram, six coss, lies the village of Zilimjhar, containing about fifteen or twenty families of the Mech caste. The road is a continued jungle with trees, and without a single habitation or cultivated spot. The Meches cultivate rice and cotton, and a space of about a mile in diameter is cleared around the village. One coss west of Gendagram we crossed the Champamati river, about twenty yards broad and exceedingly rapid. It is fordable except after heavy rain. To the west of Zilimjhar eight coss lies Kachubari containing five or six Bhútea houses called Changs. There are a few houses and rice fields at one place on the road. The country is covered with forests, and the long weeds begin to disappear. As far as Kachubari the ground is level, but somewhat higher than the intermediate space between Zilimjhar and Sidli. West of Zilimjhar we passed the Dalpani, a river of the same description as the Champamati. To the north of Kachubari, six coss, lies Pakkeehagga which is merely a large stone on the side of the river. The road leads through a forest of Sal trees and runs chiefly along the banks of a river: at Pakkeehagga small hills commence; there are no habitations on the road. One coss north-west of Kachubari, we crossed the Sarabhanga river. It is about eighty yards broad and exceedingly rapid but is fordable except after heavy rain. To the north of Pakkeehagga, eight coss, is the hill of Bissu-sinh where the Súba of Cherang resides during the cold weather. There is no village here nor on the road, which runs over small hills, and through forests of Sal and other trees. We crossed three small streams on this march without bridges. To the north-west of Bissu-sinh, sixteen coss, lies Dúbleng, where there is one Bhútea house. There are no villages on the road, but the country to the west of Dúbleng is inhabited, and furnished us with porters. The road leads over to the hill of Kamli-sukka, a very lofty mountain, from which the Berhampooter and the Garrow hills are distinctly seen; the road is about a cubit broad, and passable for loaded horses. There are no bridges on this day's route. We started before sunrise and arrived at Dúbleng at ten o'clock at night; the hills are bare towards the top, but lower down they are covered with trees, and a few fir trees begin to be seen on the north-west declivity of Kamli-sukka. At the bottom of this hill, previously to arriving at

Dúbleng, we crossed a small rivulet. To the west of Dúbleng, eight coss lies Cherang, the residence of a Súba during the hot weather. The road is hilly, but no very high mountains were passed, and it is practicable for cattle of any description; there are a few scattered houses on the way. Cherang is visible from Dúbleng, and the houses can be seen in clear weather without the aid of a glass. After proceeding half a coss from Dúbleng, we crossed a river over a wooden bridge; an elephant might pass this part of the road by going below. After crossing this river, fir trees begin to prevail, scantily interspersed with other kinds. At Cherang there is no village, but to the south of it, the country is said to be inhabited. At Cherang there is a stone-house, inclosed with walls, after the fashion of the Bhúteas. To the north of Cherang, ten coss, lies Majang, from which place Cherang is visible without the aid of a glass. The direct distance is estimated at only three coss, but we were from sunrise to about three in the afternoon on the way. The road is hilly but passable for cattle all the way. We crossed one river about half-way by a substantial wooden bridge. The river was rapid and not fordable, but to the south the bed was wider and the water shallow. No houses or cultivation were seen on this day's march. At Majang there is a village of about seven or eight families, living in houses with earthen walls, the ryuts not being allowed to build with stone. To the north-east of Majang, nine coss, lies Harassú where there is only one house, and none on the road. After descending the hill from Majang, we arrived at the bank of the Pússú Mússú river, which runs by Púnakha and Andipur, and continued not far from its left bank all the way, as we judged from the noise of the waters when we could not see it. On this day's march scarcely any trees except firs were seen. Some of the hills were bare towards the top. The road was the worst we had hitherto travelled over, running in many places along the sides of precipitous banks. It is barely passable for horses, but there is a road along the river, by which it is said elephants can proceed. We started from Majang at sun-rise and arrived at 3 P. M. at Harassú immediately after crossing a river by a wooden bridge. To the right of our route there was a very high mountain. From Harassú north-west, eight coss, lies Kishnyeí,

where there is a single Choukidar. Before arriving at Kishnyeí, we crossed a river by a wooden bridge; the road was entirely destitute of habitations, but better than that of yesterday and passable for horses or elephants. We started in the morning and arrived at 2 P. M. From Kishnyeí west, ten coss, lies Jhargaon where there is one house for the Pilo, and some huts for slaves. On the road we saw no houses or cultivation. The road is like that of yesterday but there is one very steep ascent, passable however for cattle of any description. We started from Kishnyeí early in the morning and arrived about 5 P. M. at Jhargaon. There is some rice cultivated at this place. On this day's march we crossed one river on a wooden bridge and three smaller streams. From Jhargaon west, twelve coss, lies Challa, where there is a village containing eight or ten families, and an extensive tract of cultivated land to the south-east. Half-way there is a small village and some cultivation. Our route of this day and yesterday was along the left bank of the Pússú Mússú river, which comes from Púnakha, but at some distance from it. Before arriving at Challa, we forded a small river about knee deep. From Challa north, ten coss, lies Khodakha where the Governor of Andipur resides during the hot weather. At Khodakha there is a village of about sixty houses including convents, and a fort, but there is little cultivation, the climate being too cold for rice to come to perfection. From Challa to Khodakha, the road ascends the greater part of the way, and is crossed by three streams (believed to be the same,) by wooden bridges. The road was passable for horses but scarcely for elephants. Khodakha is situated on a flat space on the banks of a stream, and at a great height. From an eminence a little to the west of it Andipur is visible. From Khodakha, ten coss west, lies the fort of Andipur. After leaving Khodakha and beginning to descend the hill, Andipur and the river become visible. The road descends all the way and is very steep and scarcely passable for cattle. Close to Andipur we crossed the Pússú river. At Andipur there is a fort but no village. It is situated above the confluence of the Pússú and Mússú rivers: there is some level ground and cultivation near it, and villages at no great distance.

The route from Andipur to Cooch Behar being already known, the rest of the journal is omitted.

CERVUS HIPPELAPHUS ARISTOTELIS

IV.

On the Black Deer of Bengal.

By Mons. A. DUVAUCEL.

To the Secretary of the Asiatic Society.

Sir,

I have the honor to address you a short dissertation on the Hippelaphus of Aristotle, which I think I have recognized in the great species, which bears the name of Black Deer in Bengal.

I shall feel extremely flattered if my conjecture should appear to the Society to be well founded, and if they judge these observations worthy their notice.

I have the honor to be,

Sir,

Your most obedient and humble Servant,

A. DUVAUCEL.

Chandernagore, March 1st, 1822.

REMARKS ON THE HIPPELAPHUS OF ARISTOTLE.

OF all the animals described by the ancients, none ever gave rise to greater disquisitions among the moderns, than the ἱππελαφος of Aristotle, and if with respect to that Deer, I venture to express an opinion contrary

to that of those learned naturalists who have written on the subject, it is because I have over them the advantage of having travelled in countries, and met with species, which they had no opportunity of observing.

" Quin etiam Hippelaphus satis jubæ summis continet armis, qui à formâ
" equi et cervi, quam habet compositam, nomen accepit, quasi equicervus
" dici meruisset—tenuissimo jubæ ordine a capite ad summos armos cri-
" nescit. Proprium equicervo villus qui ejus gutturi modo barbæ dependet.
" Gerit cornua utrumque, exceptà fœminà—et pedes habet bisulcos.

" Magnitudo equicervi non dissidet a cervo. Gignitur apud Arachotas,
" ubi etiam boves sylvestres sunt, qui differunt ab urbanis, quantum inter sui
" urbanos et sylvestres interest. Sunt colore atro, corpore robusto, rictu
" leviter adunco: cornua gerunt resupinatiora. Equicervo cornua sunt
" Capreæ proxima."—*Hist. Anim. lib.* xi. *cap.* i. *Trans. of Théodore Gaza.*

Most of the *Mammifera* described by Aristotle, having been found in all the countries of Europe, it was the more natural to believe this was the case, also with regard to the Hippelaphus; considering also that animals of this kind generally spread over the whole of a continent, and that moreover the description given by the Macedonian naturalist, accorded in many respects with one of the species most common among us, (*Cervus Elaphus, Linn.*)

Besides it has been remarked, that the species of Deer were singularly modified by the nature of the soil on which they lived, and that the same animal, after quitting barren mountains to inhabit fertile vallies, soon exchanged its rugged appearance, lost its hair more or less dark, and even put off its *ensemble*, sometimes thick and heavy, to assume forms of more elegance, colours of lighter hues, and faculties more exquisite.

It had also been observed that age operated so complete a metamorphosis, that the same individual was not to be recognized when old.

The common Deer had also been known to wear a short, soft, thin sown coat, and afterwards it had been seen covered with long, rough, and dark hair, and even to have on its neck and chin such long hairs as to bear the appearance of a mane and beard.

It was also well known that numerous local or accidental causes might alter the horns, either as to their size or their direction, and even the number of their branches; and, ever persuaded that Deer claimed no indigenous country, but lived equally well in all places, it was thought that Aristotle's description might be either unfaithful or incomplete, rather than allow that great observer to have described exactly an animal no longer to be found.

Gesner, Caius, and others among the learned have pretended that the Hippelaphus was no other than the Elk *(Cervus Alces Linn.)* which in fact bears some of the characteristic marks indicated by Aristotle. Buffon however in opposing this error triumphantly, falls into another in considering the Hippelaphus as a variety of the European Deer. Exleben and Linnæus recognized it in the Deer of the forests of Germany, and, on that account, called it *Cervus Hippelaphus,* still considering it as a variety of the *Elaphus.* Monsieur Cuvier himself thought it right to adopt the opinion of his predecessors, and this idea confirmed by so many respectable authorities, is so generally received at present, that it will require almost as many years to destroy, as were requisite to establish it.

And yet it appeared natural to believe in the existence of the Hippelaphus as a peculiar species, since the Europe Deer very common in Bengal, must have been so likewise in those neighbouring countries, visited by Aristotle, and that having it in his power often to compare these kinds of animals, that great naturalist could not have mistaken them. For as to the peculiarities of a beard and mane, of size and colour, if they were to be met with in a certain degree in the Europe Deer, there also existed another character very specific, that of the horns, which Aristotle compares to those of the Roe-buck, a difference too marked to be considered as a modificati-

on, and yet a distinction too nice to be made by any one not well practised in natural history.

But these reflections could not take place amidst the prejudices that regarded the Hippelaphus, and if we suggest them now, it is because we have recently learned that Mons. Cuvier has recognized it in a stuft animal in England, and because chance has thrown in our way a new Deer, so similar to the one described by Aristotle, that no doubt can remain of its being the very same animal, since this species, very numerous in Bengal, and equally common on the banks of the Indus, must also be easily met with in the province of the Arachotas, situate on this side mount Caucasus, between Persia and India, where Aristotle made his observation, and where, in fact, there exists a large kind of black Deer which the Persians call *Syah-Ahu*.

This animal, which we have repeatedly observed in the mountains of Sylhet, as well as at Sumatra, and of which two individuals are now existing in the menagerie at Barrackpore, attains a much larger growth than the common Deer, being much taller, and differing from it also by its coat which is of a darker hue, from which it derives in all countries the name of Black Deer.—*Rousso Itam* with the Malays; *Kála Harin* in Bengal.

When two years old, its lower jaw and its neck are covered with hairs, long and hard, similar to a mane and beard, though precisely neither the one, nor the other, since they are not implanted on the chin only, but descend on the sides and under the neck. Consequently the appellation of *mane* is no more correct than that of *beard*, and perhaps Aristotle might be taxed with a slight negligence, were it not that we may believe him to have seen the animal at a distance only, or that in default of the appropriate words, he may have chosen those that conveyed a juster idea of a lower jaw and a neck covered with long hair.

The physiognomy (if I may use that expression in English) of the Black

Deer differs widely from that of any other, and even gives to it something of the appearance of the horse, which added to its size and mane may possibly have contributed to give it the name of *Hippelaphus*. Its larger ears, and its tail better furnished with hair than that of Deer in general, are additional specific characters, which distinguish it from them, and its horns, forked at the extremities and with only one antler at the base, are precisely such as are indicated by Aristotle, that is, those of a Roe-buck.*

The female differs from the male by the total want of horns, as Aristotle observes, and by somewhat shorter hair on the neck and inferior jaw, but even in the absence of this last peculiarity, which doubtless is scarcely perceptible in the younger individuals, it is easily distinguished by the colour of its coat, which is always darker than that of the common Doe.

The Hippelaphus condemned to the same habits with other Deer, lives in numerous flocks, or in insulated pairs, according to its age or to the season of the year. These two epochs, as well as the places frequented by them, have great influence on their size and colour, as it has been remarked on the *Cervus Elaphus*. In countries where food is not abundant, and where moreover they have to fly from powerful enemies, none are found, but of a middling size. On the contrary, those who live in countries where vegetation is rich, and where tygers are not common, attain very considerable dimensions, and we have seen some in the island of Sumatra not inferior to the largest horses.

The Hippelaphus is equally to be met with in Java, and it is probably the same animal indicated by Pennant, and Shaw, under the name of *Great Axis*, as an inhabitant of the marshy forests of Borneo.

* We must remember a very important observation of Buffon's with respect to the Latin translation of Theodore Gaza, which is that he has translated the word δοκος, by *Capra*, in lieu of *Caprea*, and therefore the word *Capreæ* must be substituted to that *Capræ*, i. e. the horns of the *Roe-buck* to those of the *Goat*.

If the preceding remarks and conjectures are well founded, it will result from them;

1st. That the Hippelaphus of Aristotle is in reality a peculiar species very different from the Europe Deer, *Cervus Elaphus*, with which it has hitherto been confounded.

2d. That the name of Hippelaphus does not belong to the Deer that is so called in the *Systema Naturæ*, by Linnœus, and Gmelin.

3d. That the Hippelaphus is no other than Pennant's *Great Axis*, which alone ought hereafter to bear the name of *Cervus Hippelaphus*.

V.

An Account, Geographical, Statistical and Historical of Orissa Proper, or Cuttack.

By A. STIRLING, Esq.

PART I.

General Description, Boundaries Ancient and Modern, Soil, Productions, Geology, Rivers, Towns, Commerce, Population, Revenues, Political Institutions and Land Tenure.

THE extent and boundaries of the territory called Orissa, have undergone many and essential changes at different periods of its history, and remain to this day very ill-defined and imperfectly understood. The corresponding Puranic division of Utkala Desa or in the vulgar tongue Utkal K'hand reached on the north to Tumlook and Midnapore, taking in a portion of Rárha Des in Bengal, and south to the Rasikulia or Rasikoila Nadi which flows into the sea at Ganjam. On the east it was bounded by the ocean and the river Hoogly, and on the west by Sónpur, Búnay, and other dependencies of Sembhelpur and Gondwana. *Or Desa*, or *Oresa*, the old original seat of the *Or* or *Odra* tribe, had anciently less extended limits, the Rasikulia river marking its southern and the Kans Bans which passes near Soro, in latitude about 21°. 10'. N. its northern extreme; but in the progress of migration and conquest, the *Uria* nation carried their name and language over a vast extent of territory, both on the sea shore and in the hills, including besides Orissa properly so called, a portion of Bengal and of Telingana. Dur-

ing the sway of the Princes of the Ganga Vansa line, for a period of nearly four centuries, the boundaries of the Raj of Orissa may be stated as follows, with sufficient accuracy for a general description. North, a line drawn from the Tribeni or Tirveni ghat above Hoogly, through Bishenpur to the frontier of Patkúm; east, the river Hoogly and the sea; south the Godaveri or Ganga Godaveri; and west, a line carried from Sinhbhúm to Sonepur, skirting Gangpur, Sembhelpur and its dependencies, and thence through Bastár to Jayapur, and the Godaveri. Thus in the more prosperous days of the Orissan monarchy, and that too at no very remote period, it comprised within its limits four of our modern zillahs entire, and portions of three others, viz. Midnapore, Cuttack, Ganjam, and Vizagapatam, with parts of the Jungle Mehals, Hoogly, and Rajamundry, besides a portion of the hills and woodland country of Gondwana. The degree of authority exercised by the sovereign power throughout this extensive territory, fluctuated of course greatly at different periods, depending on the personal character of the reigning Prince, the circumstances of the times, and the conduct, resources and dispositions of the numerous dependant Rajas and feudatories, whose principalities or jurisdictions have at all times formed so remarkable and important a feature in the political geography of Orissa. Occasionally the conquests of the Gajapati Princes extended into the more remote parts of Telingana, and even to the Carnatic, but it appears that they never obtained a firm footing in any acquisitions; South of the Godaveri and during the last century of their independance, their possession even of Rajamendry was much contested and disturbed by the Bahmini sovereigns of the Deccan. One of the first arrangements of the ministers of Akber on annexing Orissa to the Dewani of the Mogul empire, was to join Hoogly and its ten dependent Mehals, to Bengal. The Mogul Subah of Orissa then comprised the whole country stretching from Tumlook and Midnapore on the north, to the fort of Rajamendry or Raj Mahendri south, divided into the five unequally apportioned,* Sircars, called Jellasore, Budruck, Cuttack, Calinga Dundpat,† and

* The three first of these were after Akber's reign subdivided into lesser Sircars, which will be enumerated in another place.

† *Dundpat* implies one of the larger territorial divisions under the old Uria Raj.

Rajamundry. The vast range of hilly country bounding the Subah to the westward, from Bishenpur down to the neighbourhood of Karronde, Bastár and Jayapur, was classed under a separate head in the Revenue accounts of the empire, for reasons which will be subsequently stated, and was allowed for many years after the Mohammedan conquest, to remain entirely under the management of its Native Chiefs, subject either to the condition of Military service or to the payment of a light quit rent. Very early after the settlement of the Emperor Akber, if not indeed at the moment of its formation, the Sircar of Rajamendry and that portion of Kalinga Des which lies south of Tikali Raghunat'hpur were dismembered from Orissa, by the successful encroachments of the Mohammedan Kings of Golconda, called the Kutteb Shahis, but of this event, no distinct account is given in the history of the country. At the opening of Mohammed Tacki Khan's administration, A. D. 1726, who governed as the Naib or Deputy of the Nazim of the three provinces, the most authentic Revenue records exhibit the Subah of Orissa as extending from a place called Radha Dewal seven coss beyond the town of Midnapore to Tikali* Raghunat'hpur, one of the estates in or near the Mahendra Mali range of hills in Ganjam, a computed distance of 176 coss, and on the west from the sea at False Point to the Bermúl Pass, reckoned at coss eighty-five. Before the close of his government its limits had become much reduced. The Officers of the Nizam of Hyderabad intriguing with the powerful Zemindars (Poligars) of the Ganjam district, contrived to alienate from the Province the whole of the country south of the Chilka Lake. On the Bengal side, views of financial convenience induced the Nawab Shúja Uddín Mohammed Khan to annex the mehals included in the old Jellasore Sircar, as far as the Subanrekha, to the territory immediately dependent on the Moorshedabad Government, with the exception of Pergunnahs Pattaspur, &c. It was thus bounded, viz. by the Su-

* Mr. Grant in his Political Survey of the Northern Sircars calls this place "Teckaly or Rogonaut'hpore on the sea coast 43 miles N. E. from Cicacole, the inheritance of Juggut Deo another descendant of the Royal family of Orissa but more immediately branching from that of Kimedy."

banrekha and Pergunnah Pattaspur, &c. north, and by the Chilka Lake on the south; East, by the ocean, and west by the Bermúl Pass, that Orissa was relinquished to the Berar Mahrattas, by the famous Aliverdi Khan in 1755-6 A. D. in lieu of the sums which he had stipulated to pay as Chouth: and it is to this tract, the modern zillah of Cuttack, which may not inaccurately be called Orissa Proper from its comprising the ancient original country of the Úria or Odra nation, and from the circumstance of its retaining amongst the natives of the present day the exclusive appellation of *Or Desa* or *Oresa*, that the following description is intended chiefly to apply.

The Purans and Upapurans are lavish in their praises of Utkal K'hand,* the real etymology of which word I apprehend to be, "The famous portion or country," and not, the famous country of Kala, as rendered by a very high authority. It is declared to be the favorite abode of the Devatas, and to boast a population composed, more than half, of Brahmins. The work called the Kapila Sanhitá, in which Bharadwája Muni explains to his inquiring pupils, the origin, history, and claims to sanctity of all the remarkable *Khetrs* of Orissa opens with the following panegyric: "Of all the regions of the earth Bharata K'hand, is the most distinguished, and of all the countries of Bharata K'hand, Utkala boasts the highest renown. Its whole extent is one uninterrupted Tírt'h (place of pilgrimage.) Its happy inhabitants live secure of a reception into the world of spirits, and those who even visit it, and bathe in its sacred rivers, obtain remission of their sins though they may weigh like mountains. Who shall describe adequately its sacred streams, its temples, its khetrs, its fragrant flowers and fruits of exquisite flavour, and all the merits and advantages of a sojourn in such a land. What necessity indeed can there be for enlarging in the praises of a region, which the Devatas themselves delight to inhabit?" The Panjias or Annalists of Orissa are fond of relating, that when the famous Sivai Jay Sinh, the Ge-

* Some of the Pundits of Cuttack explain it to mean the region famous in the Caliyuga for its temples and khetrs.

neral of Akber, marched with an army into the country in 1580, A. D. he was struck with amazement at the sight of its sacred river the Mahánadi, its vast crowds of Brahmins, its lofty temples of stone, and all the wonders of the ancient capital Bhuvaneswar, and exclaimed, " This country is not a fit subject for conquest, and schemes of human ambition. It belongs wholly to the Gods, and is one entire Tírt'h." He accordingly interfered little in its affairs and soon returned to Hindustan, leaving a large share of authority in the hands of its Native Princes.

The Hindus of modern times however, freely admit, that the estimation in which Orissa is or was held, is to be ascribed entirely to its temples, places of pilgrimage, and its Brahmanical institutions. At all events, the European observer will soon discover, that notwithstanding its Puranic celebrity, the soil of the country is generally poor and unfruitful, all its natural productions of an inferior quality, and that its inhabitants rank the lowest, in the scale of moral and intellectual excellence, of any people on this side of India.

The modern Orissa or Cuttack, comprises, as is well known, an extensive, little explored region, on the west, consisting chiefly of hills and forests, intersected by many fertile plains and vallies ; and a plain level country, extending from the foot of that barrier to the sea, evidently of alluvial formation, the uniform surface of which is not disturbed by a single rocky elevation throughout its whole extent—nor does a single stone occur between the beds of iron clay lying on the western frontier, and the ocean, if we except the curious spheroidal concretions of calcareous matter or limestone nodules which are found very generally dispersed. The province may be considered as divided both naturally and politically into three regions, distinguished from each other by their climate, general aspect, productions and the institutions prevailing on them, viz. 1st. The marshy wooodland tract which extends along the sea shore, from the neighbourhood of the black Pagoda to the Subanrekha varying in breadth from five miles to twenty : 2ndly. The plain and open country between this and the

hills, whose breadth on the north is as trifling as ten or fifteen miles, and never exceeds forty or fifty; and 3rd. The hill country. The first and third are known to the natives as the Eastern and Western Rájwára or Zemindara, that is, the country occupied by the ancient feudal Chieftains, Khandaits, Zemindars or Poligars of Orissa; and the second, as the Mogulbundi or Khaliseh, being that from which the indigenous sovereigns and the Mogul conquerors of the country, derived the chief part of their land revenue, and which at present pays a rent to the British Government of Sicca Rupees 1,264,370; whilst the tribute yielded by the other extensive portions is fixed in perpetuity at the low sum of Sicca Rupees 1,20,411.*

It will be convenient to describe the soil, productions and geological formation of the country in the order above noticed.

The first region has much of the character of the Sunderbans, in its swamps and marshes, innumerable winding streams swarming with alligators, its dense jungles and noxious atmosphere, but wants entirely that grandeur of forest scenery, which diversifies and gives a romantic character to many parts of the latter. The broadest part of it is divided amongst the Rajas of Kanka and Kujang, and the Khandaits of Herrispur, Merichpur, Bishenpur, Golra and others of less note. The Killah or Zemindarí estate of Ál likewise comes in for a share. Northward of Kanka the quantity of Jungle diminishes up to the neighbourhood of Balasore, but the whole space is intersected by numberless nullahs which deposit, and creeks which retain, a quantity of fine mud, forming morasses and quicksands highly dangerous to the unwary or uninformed traveller. The surface of the whole is covered with coarse reedy grass, and brushwood, valuable as fuel to the salt manufacturers. One meets also with much of the Jhao or Tamarix Indica, interspersed with quantities of a stunted dwarf Palm, called Hintal

* The Jemma of Khurda, which belongs to the Rájwára, but is at present under the immediate management of the English Revenue Officers, in consequence of the dispossession of the Raja is not included in this statement of Land Revenue.

(Phœnix Paludosa). Generally, where pure sand appears, more especially to the southward, about the black Pagoda, the surface of it is covered with a thick net work, formed by the interlaced stalks of a creeping convolvulus, with bilobate succulent leaves, which are for half the year loaded with large gay looking flowers of a bright reddish purple. The natives call it Kynsarílatá. A delicate succulent plant with small bright green leaves growing thickly together (class Tetrandria, order Monogynia) is also very common, and the summits of the sand hills are for the most part crowned with tufts of the Asclepias Gigantea and a stiff thorny gramineous plant known by the name of the Goru Kanta. The prevailing timber is the Sundari (Query, Helitiera Litoralis, or a species of Sterculia?) Extensive thickets of the thorny bamboo render travelling impracticable in most parts of Kujang, Herispur, &c. except by water. The whole of the jungles abound with Leopards, Tygers, and wild Buffaloes, and the rivers at the flowing of the tide are perfectly surcharged with large and voracious Alligators of the most dangerous kind. The climate seems to be hurtful even to the natives, who are peculiarly subject to two formidable diseases, the Elephantiasis, and a species of dysentery called the Súl, besides the commoner complaints of fever and ague.

In this wild inhospitable tract however the finest salt of all India is manufactured, which under the monopoly system, yields annually to the Company a net Revenue falling little short of eighteen lacs of Rupees. The produce, distinguished for its whiteness and purity before it has passed into the hands of the Merchants, is of the species called Pangah procured by boiling. The process observed by the Molunghees or manufacturers is rude and simple to the last degree. The sea-water which is brought up by various small channels to the neighbourhood of the manufacturing stations or khalaris, is first mixed up and saturated with a quantity of the salt earth or efflorescence, which forms on the surface of the low ground all around, after it has been overflowed by the high tides, and which being scraped off by the Molunghees, is thrown into cylindrical recepta-

cles of earth having a vent underneath, and a false bottom made of twigs and straw. The strongly impregnated brine filtering through the grass, &c. is carried, by a channel dug in the ground, to a spot at hand, surrounded with an enclosure of mats, in the centre of which a number of oblong earthern pots, generally about two hundred, are cemented together by mud into the form of a dome, under which is a fire place or oven. The brine is poured into this collection of pots or choolahs, and boiled until a sufficient degree of evaporation has taken place, when the salt is taken out as it forms, with iron ladles, and collected in heaps in the open air. The heaps are afterwards thatched with reeds, chiefly the Nal (Arundo karka) and remain in this state until sold, or removed by the Officers of the Agency.

Occasional patches of rice cultivation are to be met with in this portion of the Rajwára producing sufficient grain for local consumption, and the Raja of Kanka exports even a considerable quantity both to Calcutta and Cuttack. The sea all along the coast yields abundance of fine fish, of which upwards of sixty-one edible kinds are enumerated, by the natives. Those most prized by Europeans are the Sole or Banspatti, Tapsiya (Mango Fish,) Phirki (Pomfret,) Gajkarma (Whiting,) Hilsa (Sable Fish,) Kharanga or Mullet, a fish called the Bijay Ram something resembling Mackarel, and the Sal or Salia. The Chilka Lake produces noble Bhekti or Cockup. The value of the excellent Turtle, Oysters, Crabs, and Prawns, found off False Point, and in other parts, was unknown to the natives prior to their subjection to the British rule, but they are now of course eagerly sought after, to supply the stations of Balasore, Cuttack and Juggunnath. The great season for fishing is in the winter months, from October to February, whilst the wind and the surf are moderate. At this time all along the Northern coast the fishermen go out in parties of from twenty to thirty each, with large nets, which they set up before the commencement of flood tide, with the aid of bamboo poles, in the form of a vast triangle, having the base open towards the shore. As the tide retires the fishermen take in and close up the nearest nets, thus driving the fish into the apex of the

triangle where there is a net placed with a large pouch ready for their reception. The quantity obtained at a haul in this way is often prodigious. The produce is taken to the neighbouring villages for sale, after reserving a sufficiency for home consumption, and a large quantity travels far into the interior, unprepared in any way, which it of course reaches in the last stage of putridity, but not on that account a bit the less palatable or acceptable to the nice and scrupulous Hindu.

On emerging from the insalubrious and uninteresting tract just described, you arrive at the second and most important division of Cuttack, called the Mogulbandi or Khaliseh land which is divided into 150 Pergunnahs, and 2361 Estates of individuals, recorded in the public account of the British Government as Zemindars and Proprietors of the soil. Though this region be in general highly cultivated, and produces most of the grains and vegetables common in Bengal, its soil is certainly for the most part of a poor and unfruitful description. South of the Mahánadi it may be characterized as generally light and sandy. Beyond that river, and especially in the neighbourhood of the hills, it acquires a clayey consistency, and appearance, and is often remarkably white. Often too, for miles together it has the surface strewed with a thin sprinkling of gravel or limestone concretions called by the natives Gengti. This description of soil extends nearly to Midnapore. It is generally speaking hungry and unproductive, particularly near the hills; and large plains occur, as about Dhamnagher and Badrak, which are wholly unfit for cultivation, growing nothing but low stunted brushwood, chiefly the wild Corunda and tufts of the Bena grass.

Rice is the great article of produce, and consequently of food, throughout Orissa Proper. In the Pergunnahs north of the Byteriní it is almost the sole object of agricultural labor. The grain is in general large and nutritious but coarse, and is considered far inferior to the average produce of Bengal and Behar. The two great rice crops of Cuttack are called the Sared and Beali. Of these the first and principal one is sown in May and June, and reaped from the middle of November to the middle of Ja-

nuary. The land which grows it rarely yields any second crop. The second in importance called the Beali is sown about the same time on the higher lands, and the produce is obtained from the end of August till the end of September. Afterwards a plentiful crop of the Rubbee grains is derived from the same fields. There is another less abundant crop called the Satkia put into the ground in August and September, and reaped in November, and an inferior description of rice which is sown in low marshy spots at the opening of the cold weather, and by frequent transplantation and irrigation is rendered fit for cutting, in the following April. The cultivation of the latter sort called *Dalo*, takes place chiefly in the Pergunnahs between Khúrdah, the Chilka Lake and the sea.

In the Northern Pergunnahs the Sared rice cultivation is occasionally but rarely diversified with a few patches of Sugar-cane, Tobacco, and Palma Christi, in spots suited to their production. In the Central and Southern parts however abundant crops of pulse, millet and vegetable oils are raised during the cold weather, the chief of which are enumerated below.* Next to rice, the culture of the Arend or Palma Christi (Ricinus Communis) is perhaps the most abundant. The natives undoubtedly use the oil in their common cookery, mixed with a small quantity of mustard seed oil, which latter they prefer for burning as being the most economical. Cotton, Sugar-cane, and Tobacco are every where common South of the Byteriní but it must be acknowledged that the produce is of a sorry description. The richer natives will not condescend to use the *Desi* Tambáku and the cotton formerly required for the manufacture of the finer fabrics was nearly all imported from Berar. Good wheat and a small quantity of barley are grown in Pergunnahs Saibír and Asseresser. There is but little

* Viz. Múng, or *Phaseolus Mungo;* Mash Kalai, or *Phaseolus Radiatus;* Chenna, or *Lathyrus Aphaca;* Khisari, or *Lathyrus Sativus;* Massúr, or *Cicer Lens;* Arhe, or *Cytisus Cajan;* Kulthi, or *Dolichos biflorus;* Berkúdi, *(Beri) Phaseolus max.* Bhút, *(Cicer Arietinum);* Kangni, or *Panicum Italicum;* Makúand Jenar, *Andropogon Sorgum.* Bajra (Panicum Spicatum); Marúa (Eleusina Corocana); Til (or Sesamum Orientale); Sarisha or Sinapis Dichotoma and Phesi (Linum usitatissimum).

of the vegetables producing materials for dying, cordage, &c. reared in the district, the Safflower (Carthamus Tinctoria) Pát (Hibiscus Cannabinus) and Kasmira or Sana (Crotolarea Juncea) being the only kinds that are commonly met with. The culture of the Poppy, Mulberry and Indigo, is unknown in the plains of Orissa. Nor, what will appear strange, were the peasantry acquainted with the method of cultivating the Betle vine, until taught by the natives of Bengal some generations back. The Piper Betle now flourishes in the gardens around Púrí and in the neighbourhood of a few Brahmin villages, but the produce can be adequate only to the supply of a very limited consumption, notwithstanding the assertion of the author of the work called the Ayeen Acberi or Institutes of Acber, that "they have a great variety of the Betle leaf in Orissa." The spots which are destined for the cultivation of Betle as also of Turmeric, Sugar-cane, &c. require laborious preparation and the application of a large quantity of manure, for which latter purpose the oil cake or Pirí made of the refuse of the sesamum, mustard and other seeds of the same family is generally used. An occasional sprinkling of rotten straw, cow-dung and ashes is the only manure expended in the fields which yield the other kinds of produce.

Orissa has little to boast of in the produce of its gardens though praised by Abulfazl for the excellence and abundance of its fruits and flowers. There is no deficiency however of the humbler kinds of pot herbs, and cucurbitaceous plants, with the Hibiscus esculentus, the Solanum Melongena or egg plant, the sweet Potatoe and Lanka Mirch or Capsicum annuum. The native lists likewise comprize most of the ordinary garden produce of India.* The commoner fruits are as elsewhere, the mango, the

* Kachu (Arum Esculentum); Mula (Raphanus Sativus); Karela (Cleome Pentaphylla); Dhanya (Coriandrum Sativum); Ajwain (Ligusticum Ajwain); Metthi (Trigonella Fœnum Grœcum); Phút (Cucumus Momordica); Kankúr (do. Utilissimus); Ben Gomúga (Cucumus Madraspatana); Pita Tarai (Tricosanthes lobata); Dhúndolo (Luffapentandra); Kalam Sag (Convoloulus reptans); Lal Sag (Amaranthus gangeticus); Calra (Momordica muricata); Kala Shima (Dolichos Ensiformoides); Sorva (Anethum Sorva), &c. &c.

Phalsa (Grewia Asiatica), the Jam (Eugenia Jambu), the Guava, Custard Apple, the Harphaleri (Phyllanthus Cheramela), the Chalta (Dillenia Indica), the Kendhu (Embryopteris glutinifera), the Pomegranate, the Cashew-nut, the Jack, the Bel (Œgle Marmelos), the Kath-Bel or Wood Apple (Feronia Elephantum), and the Kharanj (Galedupa Arborea), from whose fruit an oil is extracted, used for burning by the natives. The Wine palm (Borassus Flabelliformis), and the Khajúr (Phœnix Sylvestris), abound in particular quarters. One rarely meets with the Cocoanut and Supári except in the neighbourhood of Brahmin villages, though they would thrive every where well in Cuttack, more especially the former. In all times Cuttack has been famous for its abundant produce of the fragrant Keora or Ketaca (Pandanus Odoratissimus). It grows every where wild, and is much used, jointly with several kinds of Euphorbia and Mimosa, for making hedge rows. The fruit borne in quantities by the female plant has much of the rich and tempting appearance of the Pine Apple, but on trial the inside proves to be hard, stringy, and tasteless. Its pith is used when boiled, as an article of food by the poorest classes, but seems to be little prized even by them. An intoxicating spirit is distilled however from the strongly scented flowers of the male plant, to which the lower orders have no aversion.

The surface of the Mogulbandi is in most parts south of the Kans Bans embellished and diversified with fine shadowy groves of Mangos, dense thickets of Bamboo, and the most magnificent Banyan trees. The better cultivated gardens are loaded with Jessamines, Sambacks, Marigolds, Bauhinias, the Hibiscus, Rosa Sinensis, Michelia Champaca, &c. About the huts of the natives we generally find in great quantities the Hyperanthera Morunga, Melia azadirachta and Sempervirens, Æschynomene Sesban, and grandiflora, the Bombax Heptaphyllum, Nauclea orientalis, &c. with the usual proportion of plantains.

That the inferior quality and limited growth of many of the most valuable products of agriculture in Orissa, are owing in a great degree to something unfavorable in the soil and climate, is clearly evinced by the indif-

ferent success attending the efforts of the European Residents in gardening. Much however must be ascribed to the general poverty, ignorance and want of enterprize of its peasantry and agriculturists. No one can enter the enclosures of the Sásans or villages held at a light quit rent by colonies of a particular class of Brahmins, without being instantly struck with the wide difference, which their precincts exhibit, as contrasted with the aspect of ordinary Uria Mouza. The higher description of cultivation which prevails on those lands, the superior value of their produce, and the flourishing groves and gardens which extend all around, evince what may be effected by intelligent industry, secured in the enjoyment of an adequate return and undisputed proprietary possession, even in this little favored soil and climate. It is in such situations only and in the neighbourhood of some of the well endowed temples, that the eye of the botanist is gratified by the presence of those graceful trees and plants, which constitute the chief ornament of the Indian Flora, such as the Nagacesara (Mesua Ferrea), the Moulsari (Mimusops Elengi), the Jonesia Asoca, the Ochna Squarrosa, the Sultan Champa or Calophyllum Inophyllum, the Jarool (Lagerstrœmia Flos Reginœ), and the finer kinds of Ixora, interspersed with Cocoa and Areca nut trees, and plantations of the betle vine, turmeric and ginger. The Sásan Brahmins indeed are the only cultivators or land proprietors of Orissa who manifest any symptoms of a disposition to improve their system of agriculture, or to raise any plant or produce beyond what the wants of nature absolutely demand.

The Domestic Animals of the Mogulbandi do not rank higher in the scale of excellence than the produce of its soil. The horned cattle, sheep and goats are a miserable diminutive breed. A few fine buffaloes are domesticated on the eastern frontier for the sake of their milk, but they are not at all used as beasts of burthen.

There is little game to be met with, excepting grey partridges, hares, snipes, jungle fowl and ducks of various kinds, and that little is difficult to be got at from the nature of the jungle. Few districts in India perhaps

possess fewer attractions for the sportsman. The mention of the wild animals will more properly come under the description of the hill portion of the district.

The third region to be described is that of the hills which bound the Mogulbandi to the westward from the Chilka Lake to the Subanrekha. A few groups extend into the plains, as at Derpen, Alemgir, Khúrdah, Limbai, &c. and in the latitude of about 21° 20' N. the hills take a direction considerably to the eastward for some mil es, then turning north they compress the Balasore Chucklah of the Mogulbandi within very narrow limits. The distance between the high land and the sea is no where more than from sixty to seventy miles. At Balasore a group of fine rocky hills project boldly forth, to within sixteen or eighteen miles of the shores of the bay, which were known to the old navigators as the Nelligreen (Nilgiri) mountains, and between Ganjam and the Lake a low ridge appears actually to run out into the sea, though in reality separated from its waters by a wide sandy beach. The whole of this region, reaching west as far as Sonepur, Gondwána and its dependencies, in breadth probably nearly a hundred miles, and from Sinhbhúm adjoining Midnapore, north, to Gúmser in Ganjam south, a distance of certainly not less than two hundred miles, is parcelled out amongst sixteen Khetri or Khandait Zemindars, who have been recognized by the British Government as tributary Rajas. Along the feet of the hills extends a chain of twelve more Khundaitis held by a similar class, some of whom pay a light tribute, but are subject to the British laws and regulations, whilst others have been assessed at the ordinary rate. Their estates or feudal jurisdictions are entered in the revenue accounts, under the Mogul designation of Killah* or castle. The greater killahs within the hills, are subdivided again into a vast number of dependant Gerhs or estates, which are held by hereditary officers, called

* The original meaning of *Killa* was a fort or strong place *on a hill* or mountain, though in latter times it has become applied to all kinds of places of defence. The class of estates here referred to always comprized some strong hold, difficult of access, and more or less fortified. The term properly designating the principal residence of the chief, gradually became applied to his whole country in the revenue accounts.

Khandaits, Dulbehras, Naiks or Bhúnias subordinate to the chief Zemindar.

The hills visible from the low country between the Brahmani river and Ganjam, are chiefly a granite formation remarkable for its resemblance to sandstone, and for its containing vast quantities* of imperfectly formed garnets disseminated throughout, with veins of steatite considerably indurated. They occur generally in irregular scattered groups, having peaked and waving summits, which seem to cross each other at all angles ; or in isolated conical and wedge-shaped hills wholly disconnected at their bases, and are all covered with vegetation to the very top. The greatest height of those seen from the Mogulbandi may be about 2,000 feet. Their ordinary elevation varies from 300 feet to 1200 feet. Ranges occur further in the interior of greater loftiness and regularity, but I believe that an extended, continuous chain of mountains is no where to be met with in the Rajwára of Orissa. The prevailing colour of the principal rock is red. As far as my observation goes it never occurs stratified. Its texture often approaches to slaty, and from its generally decomposing and decomposed aspect, the quantity of red spots which it contains, being the ill-formed garnets above noticed, and the frequent veins of red and white steatite intersecting it, it presents altogether a most remarkable appearance. The same rock I apprehend extends throughout the Northern Circars and far into the heart of the Deccan.

The rock most abounding in this division of the district next to the granite, is that singular substance called Iron Clay by Jamieson, and Laterite by Dr. Buchanan. It lies in beds of considerable depth on the feet of the granite hills, often advancing out for a distance of ten or fifteen miles into the

* Having enjoyed an opportunity of submitting an extensive collection of Cuttack specimens to the examination of Mr. H. Voysey, Surgeon and Geologist to Col. Lambton's survey, I am enabled by his assistance to express myself with some confidence in the little which I have to offer regarding the mineralogy of the province.

plains, where it forms gently swelling rocky elevations, but never rises into hills; sometimes it is disposed in the manner of flat terraces of considerable dimensions which look as if they had been constructed with much labour and skill. The composition and aspect of the Cuttack iron clay are very remarkable, from the innumerable pores and amygdaloidal cavities which it contains, filled with white and yellow lithomarge, and from the quantities of iron ore pebbles and fragments of quartz imbedded in it. By far the most interesting circumstance however connected with it is, its complete and intimate mixture with the granite, which has been traced in several instances, and specimens of which are in my possession, exhibiting the one rock entirely invested by the other, though it is not easy to pronounce which is the inclosing substance. We have here an instance of a rock of the Wernerian newest Flœtz trap formation, resting upon the oldest primitive rock and in actual junction with it. The granite, at the place where the specimens were principally collected, appears to burst through an immense bed of the laterite, rising abruptly at a considerable angle. Numerous broken fragments are strewed all around the line of junction, and in some specimens the two rocks are so mixed together as to form a sort of coarse breccia or rather conglomerate.

South of the Mahánadi, in the country of Khúrda a few isolated hills of white and variegated sandstone occur, curiously interspersed among the granitic ones. An indurated white lithomarge is found in company with them from which the natives prepare a white wash to ornament their houses.

In the estates of Keonjher, Nílgiri, and Moherbenj, which constitute the northernmost portion of the hilly division of the Cuttack province, the half decomposed granite above described passes into fine white granite and gneiss rocks containing micaceous hornblende as a constituent part, many of which, as I am informed, differ little in composition and general appearance from specimens collected on the highest accessible summits of the Himalaya mountains. The whole of the region now adverted to, furnishes a great variety of interesting and valuable mineral productions, and

is well worthy of attentive exploration by a Geologist qualified to describe adequately its most striking features and peculiarities. The granitic rocks are here highly indurated and denuded of vegetation, and present a bold and varied outline with frequent sharp peaks and abrupt craggy faces. They are moreover in many parts curiously intersected by trap veins, which seem to consist chiefly of green stone approaching often to Basalt and Hornblende rock. In company with these rocks, Talc slate, Mica slate, and Chlorite shist passing into serpentine and potstone, are found in great abundance. Several of the Chlorites are scarcely distinguishable from the latter mineral, and are much used under the general denomination of Múgní, for the manufacture of culinary vessels, idols, and sculptured slabs which decorate the temples and finer edifices of the Úriahs. The granites and gneiss rocks being too hard for the tools of the quarriers in this quarter, and the shists, with the exception of the Chlorite, not being of a description applicable to any useful purposes, the natives have adopted a very summary and comprehensive Geological classification. They stile the Múgní, *karma*, or useful, and all other rocks they banish into the class of *Akarma*, or useless, concerning the situation and history of which they are as provokingly indifferent as they are ignorant. Besides the substances above enumerated, a variety of Corundum, or *Corund*, is found in the Nílgiri hills, called by the quarriers *Silá Dhár*, which as the name implies, is used for sharpening their tools; also steatite, and Meerschaum in the state of a remarkably pure white powder, occur abundantly in Keonjher. The natives know no use for the latter substance, except to form the tíka or streaks which particular classes draw on their foreheads.

Iron is abundantly diffused throughout the whole of the Cuttack hills, in the state chiefly of Pisiform iron ore, earthy red ditto, and Ochry red ironstone. It is smelted principally in the estates of Dhenkanál, Angol and Moherbenj. Some of the rivers of Dhenkanál and Keonjher are said to have golden sands, but the report wants confirmation, and I have not been able to ascertain the existence of any metal except iron in this province.

The only limestones of the province, are the calcareous nodules which occur abundantly in beds and nests, both within the hills and in the open country adjoining them, consisting of a ball of tolerably pure limestone enveloped in a yellowish coating of indurated marl.

The hill estates vary much in the proportion of arable land which they contain, but, in most, a considerable quantity of rice is grown, and a few of the rubbee grains. In patches of jungle which have been recently cleared, and on the slopes of some of the minor hills, the Jowar and Bajera and the Mandia or Raggee (Eleusine Corocana) thrive with great luxuriance. Moherbenj, Beramba, Dhenkanál, and Keonjher, grow a small quantity of Indigo, and on the latter estate the Poppy even is cultivated. Keonjher during the late expedition against the Coles, was found to be for nearly one hundred miles, an open cultivated country only occasionally interrupted by ridges of hills and patches of jungle. Generally speaking, however, the land fit for tillage bears a very trifling proportion to the vast extent of rocks, hills, beds of torrents, and forests which occupy this region.

The woods of the interior produce abundance of fine timber, as the Sál, Piyasál (Buchanania Latifolia), Gamhár (Gmelina Arborea), &c. and, more rarely, the Sisú (Dalbergia Sissoo). A few teak trees are found in Despalla, but that valuable timber does not form forests nearer than the banks of the Tél Nadi which flows into the Mahánadi at Sonepur. The Sál trees of Angol, Dhenkanál, and Moherbenj, are particularly sought after from their size. They are said to form forests of great depth and grandeur, throughout a large proportion of the latter estate. Good Oranges and Mangos are produced in many of the hill estates.* The Mango tree occurs frequently both solitary and in groves, in situations where it is obviously growing wild, and the natives are fond of ascribing the existence of this

* I am not aware upon what authority Mr. Hamilton has stated that the *Orange clove* is found in the Cuttack hills and the tree called *Janool,* [Query, *Jarool,* the beautiful Lagerstrœmia Flos Reginæ], commonly on the sea shore.

highly esteemed fruit, under such circumstances, to the benevolence or caprice of the Deotas.

The trees seldom attain to a large height or luxuriant growth in the decomposed soil covering the Granitic hills, which border the Mogulbandi, or in the woods that stretch along their bases. The jungles in the latter situation abound to a remarkable degree with trees and plants yielding drugs and medicinal articles, or at least fruits esteemed such by the natives, as the Terminalia Chebula, and Belerica (Harira and Bahara,) Vangueria Spinosa (Mayan phal), Strychnos nux vomica (Kuchila), Cassia Fistula (Amaltás), Phyllanthus Emblica (Aonla), Mimosa Khadira (Khayár), Chirounjia Sapida, Sapindus Saponaria, Spondias Mangifera, Semecarpus Anacardium (Bhila), Karanj or Galedupa Arborea, &c. The following trees likewise very commonly occur, viz. Asin (Pentaptera tomentosa,) Geringa a species of Pterospermum, Lodh, (query, Phyllanthus Longifolius ?) Pátali (Bignonia Suaveolens), besides the steady companions of all Indian sylvan scenery, the Tamarind, Mango, Bamboo, Bur and Peepul (Ficus Indica and Religiosa). The produce of the above is collected by the wild inhabitants of the jungles for sale in the Cuttack market, by which traffic chiefly they gain a livelihood. A gigantic climbing Bauhinia forms a very conspicuous object in these woods, which I suspect to be the Bauhinia Racemosa described by Dr. Wallich in the 12th volume of the Asiatic Researches. The name given by the natives is Siahrí. The leaves are much used for thatching their miserable huts, and the fibres of the bark serve to bind down the thatch, and to make mats. The fruit is a huge legume of a wooden consistency, containing from four to six round flat seeds, which have a sweetish pleasant taste not unlike the flavour of almonds, and are eaten with great relish by the hill people. Amongst the underwood one observes, in great quantities, several species of Mimosas, Euphorbias, and Justicias, the Jatropha Curcas, Capparis trifoliata, a Cassia with a pale yellow flower, the wild Corunda which at most times of the year is loaded with delicate white blossoms, the Samalú (Vitex trifoliata,) Asclepias Gigantea, a white Ixora, and a vast number of

thorny shrubs, which probably have never yet been honored with a place and name in any system of botany. It is remarkable that the natives have a name for almost every plant, however humble or devoid of beauty, which may arise perhaps from the circumstance of their consuming the wild berries and fruits, to a very great extent, in aid of their limited means of subsistence. The Calamus Rotang, or ground Cane, is every where common, and seems in many parts to form a sort of Nucleus, about which the other brushwood and jungle collects in small patches. During the hot months and the rains the rich and gaudy flowers of the Capparis trifoliata,* called by the natives Barun, and the scarlet blossoms of the Palás (Butea frondosa,) interspersed with quantities of the Gloriosa superba, which grows quite wild, lend an air of splendour and gaiety even to these cheerless and uninviting tracts of jungle. In the cold weather they receive another brilliant tinge of colouring from a parasitical plant the Loranthus Bicolor, of scarlet and yellow hue, which covers the larger trees in great profusion, and from the young floral leaves as well as the inflorescence of a sort of creeper, the Combretum Decandrum, which ascends and overhangs the whole woods in large whitish masses, distinguishable by the contrast of their hue from a considerable distance. Amongst the bulbous, monandrous, and gramineous plants, which bedeck or clothe the surface of the ground, a species of Pancratium, the wild turmeric, and the Andropogon aciculatum and muricatum occur most frequently. In the pools and marshes, water-lilies of all colours, and also the true Lotus, sacred Bean Lily or Nelumbium speciosum, are found in abundance.

The vegetable dies procured from the hills, are chiefly the Bacam or Sappan wood, the Aal or Achú (Morinda citrifolia,) the culture of which is little attended to in the plains, and the flowers of the Butea frondosa.

* There are two species of the Capparis in this district, or perhaps they are only varieties of the Capparis Trifoliata. The one grows as a straggling shrub, and has a remarkably rich and beautiful blossom, the petals of which are, when young, pale green, afterwards yellow, and the stamina of a bright purple hue. The other rises to the height of a small tree. The leaves of the latter grow in threes, exactly answering to the specific character, and the flower is pretty, but less superb, than that of the first mentioned sort. The natives distinguish them by the appellations of *Arun* and *Barun*.

Lakh, Tesser or wild silk, wax, honey, and Dhúna or Indian pitch, are reckoned the most valuable articles of forest produce or *Bankar*, and are procurable in great quantities on nearly every hill estate. The Cocoons of the wild silk, are much larger than those of the real worm, and are found generally attached to the leaves of a tree called the Asin (Pentaptera tomentosa.)

The woods which skirt the western frontier of Cuttack, as well as the forests of the interior, are filled with wild animals, such as Tygers, Leopards, Panthers, Hyenas, Bears, Buffaloes, Deer, Antelopes, Hogs, the wild Dog called Balia or Sata Rohini, the Ghoranga an animal resembling the Nilgao, and the wild Ox denominated here the Gayal, a ferocious beast of immense size with a noble pair of horns, which has been well described in the 8th volume of the Asiatic Researches. Wild Elephants infested the jungles of Moherbenj and did great injury to the surrounding country, until a year or two back, when the Raja after having failed in every other attempt, hit upon the following method of getting rid of them. By the advice of a scientific byrágí or religious mendicant, he caused a quantity of some mineral poison (Mohrí) to be mixed up in balls of rice such as are usually given to tame Elephants, which were strewed about in the places chiefly haunted by the wild animals. The bait took effect; a great number of the Elephants were destroyed by the poison; it is said that upwards of eighty dead carcases were found, the rest decamped in alarm, and have since I understand made their appearance in the jungles of another quarter. From the inconsiderable size of the herds which frequented Moherbenj, it seems highly probable that the Elephant is not indigenous to the province, and it is said that the breed had its origin in the escape of some of the tame animals from their keepers in former ages.

I am too ignorant of the subject to attempt to speak of the Ornithology of the Cuttack province. Of all the feathered tribe that I have seen in the district, I have been most struck with the Dhanesa or Indian Buceros, which is found in large flocks in Khúrda, and is there called the Kuchila-khái or Kuchila-eater from the circumstance of its delighting to feed on the fruit

of the Strychnos nux vomica. The bird has a most singular appearance, particularly when flying, with its long neck stretched out horizontally, and the huge protuberance rising from the upper mandible of the bill distinctly visible from a great distance. This protuberance or horn, in the Khúrda species, measures often seven inches from base to peak, and about two and a half in height from the upper mandible. The flesh is much prized by the natives, who consider it a sovereign remedy for the rheumatic pains called *Bát*, and is often kept prepared in a particular way, with spices, for four or five years. The loud screaming and chattering noise which announce always the presence of the Indian horn bill, well entitle it to its place in the Linnæan order *Picæ*.

The province of Cuttack is watered by innumerable streams, which swell into rivers of magnitude during the rains, but few of them have any current throughout the year. I shall mention only the principal rivers, as it would be tedious and endless to attempt an enumeration of the almost countless ramifications, which strike off from the larger channels about the centre of the Mogulbandi, and assumes new and independent appellations. The chief stream in name, importance, length of course, and the associations connected with it by popular superstition, is the Mahánadi, which is said to rise near Bastar, and after passing Sembelpur and Sonepur, (at which latter place it receives the waters of the Tél Nadi) it enters the Mogulbandi division at the station of Cuttack, where it throws off its principal arm the Cajori inclining to the southward, and another on the north-east face of the town called the Berúpa. Afterwards pursuing an easterly course verging to south, it sends off to the northward another large river called the Chittertola, and numerous smaller arms, until at Párádíp, it divides into two or three considerable branches, and empties itself by two principal mouths into the sea a little south of False point, having completed a course of more than 500 miles. The breadth of this river at Sembelpur, 160 miles distant from Cuttack, is nearly a mile during the rains, and opposite to the town of Cuttack its bed measures full two miles across. After this, the main channel narrows very considerably. It deposits universally a coarse sand (intermixed with numerous frag-

ments of different coloured quartz and scales of Mica) destructive of course to the fertility of any land on which it may be carried by inundation, and its bottom is singularly irregular and uneven. During the rains the Mahánadi may be navigated as far nearly as Ryepur distant fully 300 miles from the point of confluence with the sea, though the passage is rendered difficult in the higher parts by rocks. A great portion of the bed however is dry for five or six months of the year, and it is fordable from January to June, even at the town of Cuttack.

The principal channel of the Cajorí terminates in the Alankar which is deep and narrow, and pursues a singularly tortuous course until it is lost amidst a variety of smaller ramifications. About half way between Cuttack and the sea, the Cajorí sends off a large branch which after dividing, doubling upon itself, and again branching out in indescribable intricacies, enters the sea at last in a broad channel about forty miles north of the Black Pagoda, under the name of the Deb Nadi. Another large stream leaves the above opposite to Cuttack, and subsequently divides into three principal rivers, the Bhárgabí, Dayá, and Kúsbhadrá which flow south inclining a little to the East. The latter enters the sea between the Black Pagoda and Pooree. The two former uniting again into one stream, discharge their waters into the Chilka lake (as do other branches of the Bhárgabí) called by various names at different stages of their course, and finally the Harchandí. All these deposit coarse sand like the parent stream.

Next to the Mahánadi, the Brahmaní and the Byteriní are the most important rivers of the district. The former, soon after entering the Mogulbandi, throws off a branch called the Karsua which equals either in size. All the three, after frequently dividing and branching off, unite with the Berúpa (before mentioned as an arm of the Mahánadi) at different points of their courses, and flow into the Mahánadi in two or three large channels forming the Kanka Island or Delta near Point Palmyras. Some of these rivers deposit a portion of fertilizing mud near the mouth, as well as much coarse sand.

To the northward of the above, the Solandi, Kaus Bans, Burabalang and the Subanrekha, are all respectable rivers, more especially the two latter. They deposit near their mouths a considerable quantity of fine mud as well as sand.

The whole of the Mogulbandi between the Chilka lake and the Brahmani river, is peculiarly subject to inundation from its proximity to the hills, and the astonishing rapidity with which the torrents descend in the rains; the strange conformation of the channels of some of the principal rivers, which are very broad within the hills, but divide soon after leaving them into a number of narrow streams; and also from the practice which has existed from very old times of using embankments. As an instance of rapid rise, it deserves to be recorded that, during the heavy rains of 1817, the waters of the Cajorí rose in one night a height of eighteen feet, as ascertained by careful measurement. This immense volume of water, which was then perhaps one and a half mile in breadth by thirty or forty feet depth, over-topped the general level of the town and station by a height of nearly six feet, and was only restrained from overwhelming them, by a solid embankment faced with stone and supported by buttresses, the work of former governments. The defence alluded to, however, called the revetment, has yielded in places within the memory of man, and the consequences were of course most tremendous. The Cuttack rivers are generally swollen to an extreme height about three times during each rainy season, and at such periods the crops and villages in many portions of the district, are exposed to imminent hazard. To guard against the evil as much as practicable, embankments have been always maintained by government, at a large expense. Such works are indispensibly necessary in the state to which things have been brought, but they obviously only aggravate the evil in the long run, and sometimes occasion direct mischief, by being injudiciously constructed to suit the interests of particular parties, without a due advertence to the general welfare. The embankments or *bunds* are solid mounds of earth well sloped and turfed on either side, the principal ones measuring from forty to fifty and sixty feet in breadth, and eight to sixteen in height. The havoc occa-

sioned by the bursting of one of these large bunds is generally most serious. The torrent rushes through with a frightful roar and velocity, tearing up trees by the roots, prostrating houses, and washing clean away every trace of the labours of the peasantry. The devastations of the flood too are in general more permanently commemorated, by a deposit of coarse sand, which renders the soil in the neighbourhood of the breach unfit for tillage for years afterwards.

The Chilka lake forms too material a feature in the geography of Orissa Proper, to be passed over unnoticed in this paper. The general opinion of Europeans, on a casual inspection, has been that it was formed by an irruption of the ocean, and it is worthy of remark that the native histories record the occurrence of such an event, about the beginning of the third century of the Christian æra, to which they universally ascribe the formation of the Chilka. It is separated from the sea for many miles by a long narrow strip of sand, seldom more than three hundred yards in breadth, and discharges its waters by an outfall, which has been lately excavated about a mile north of Manikpatam, the old one having become nearly choked up with sand. Its form is very irregular, the greatest diameters measuring from N. E. to S. W. thirty-five, and from E. by N. to W. by S. eighteen miles. To the southward, it is divided into numerous narrow channels by large inhabited islands, and for a long way it can scarcely be distinguished from the channel of the Harchandí, which flows into it. The general depth is about four or five feet, greatest depth six feet; and it is considered to be rapidly filling up from the sand and mud brought into it by the Dayá, Bhárgabí, and various smaller streams, which empty their waters into that basin. The Pergunnahs Rahang, Seraen, Chowbiskúd, Killahs Roreng, Kokla, Khúrda, and the Jagir of Kerar Mohammed, encircle or touch its shores for nearly two-thirds of the whole circumference. On the Ganjam side the hill estates of Calicote and Palúr occupy the remaining interval. The lake is valuable to the Company for the salt which it yields, called Karkach, obtained by solar evaporation, of which nearly two lacs of mands are obtained

annually, on the Jagir of Kerar Mohammed, and to the inhabitants of its vicinity for its fishery, the produce of which when dried, forms a considerable article of export. On the Cuttack side its shores are flat, marshy, and destitute of picturesque beauty, but the opposite banks from Banpúr to Rhamba exhibit scenery of a very romantic and diversified character. The hills of Khúrda, Gúmser, and Calicote, are seen extending along the whole of the south western face in irregular chains and groups of moderate elevation, some of which jut into the lake, forming low rocky points or promontories. The Chilka itself, north of Palúr, expands into a majestic sheet of water, interspersed with a few rocky Islands, and enlivened by boats either sailing along before the wind, or forced on by punting with bamboo poles called laggis, or stationary for the purposes of fishing. If the visitor is curious enough to approach these islands, he will be struck with their singular conformation. They consist entirely of huge rounded blocks of a highly indurated porphyritic granite, containing large crystals of felspar, on which the hammer will scarcely make any impression, tossed and piled on each other in the wildest confusion, and exhibiting every symptom of violent convulsion and disturbance. Some of the masses are arranged in the form of fortresses with huge round bastions, and others present much the appearance of some grand edifice of ancient days, in ruins. A scanty soil which has formed on their summit, by what process one cannot readily conceive, gives nourishment to a few peepul trees, mimosas, euphorbias, and gramineous plants. They are the resort of numerous aquatic birds, chiefly of the Saras kind, who enjoy exclusive and undisturbed possession, except when roused occasionally by the approach of a chance visitor.

Towns. The only collections of houses which deserve the name of Towns in Orissa Proper are, Cuttack, Balasore, and Jagannath. Jajpur, though a place of great sanctity in the estimation of the Hindus, and the site of an ancient capital, is merely a large village. The more important Kesbehs, or head Villages of Pergunnahs are, Badrak, Soro, Kendrápari, Asserajsar, Hariharpore, and Pipley, but these are of small size, and nearly all the

rest of the Cuttack Mouzahs are mere hamlets, if we except the villages of the Sasan Brahmins. The country of Rajwára does not, I believe, contain a single respectable village.

The extent, appearance and population of the Town of Cuttack, are not unsuitable to its rank as the capital of a large province. Its situation on a tongue of land or peninsula, near the bifurcation of the Mahánadi, is commanding both in a political and commercial point of view, though these advantages have been in some degree counterbalanced, by the outlay incurred in defending it by stone revetments, from the encroachment of the rivers which wash two of its sides. The hilly country of Rajwára seen from its environs furnishes a pleasing and picturesque prospect.

The real etymology of the word Cuttack is *Katak* signifying in Sanscrit a royal residence, or seat of empire. It was one of the five Kataks, or Capitals of Gangeswara Deo, the second prince of the Gang Bans line, and is still distinguished by the natives as Katak Biránasí or *Benares*, by which name also it is mentioned in Ferishteh's History of Bengal, and in the Ayin Acberi. The denomination Biránasí, however, has been in latter times confined mostly to a village, or Patna, which stands near the point of separation of the Mahánadi and Cajorí rivers, about four miles distant from the town. Authorities vary as to the date of the foundation of Katak Biránasí, but there seems good reason to think that it became a capital city as early as the end of the tenth century, during the reign of the Kesarí princes. Chowdwar, Jajpur, and Pipley, divided with it at different periods, the honor and advantage of accommodating the Hindu court of Orissa.

The only monument of the Gajpati Rajas which their ancient capital exhibits, is the fortress of Barabati, built probably in the 14th century by Raja Anang Bhím Deo. Some ascribe its erection to Telinga Mukund Deo, the last of the independant sovereigns of Orissa, and others refer it back to a period as early as the times of the Kesarí dynasty. However that point may stand, its square sloping towers or bastions, and

general style, bespeak clearly a Hindu origin. The Mohammedan or Marhatta governors added a round bastion at the N. W. angle, and constructed the great arched gateway in the eastern face, which alterations are alluded to in a Persian inscription, giving for the date of the repairs and additions, according to the rules of the Abjed,* the fourth year of the reign of Ahmed Shah or A. D. 1750. The fort has double walls built of stone, the inner of which enclose a rectangular area measuring 2150 by 1800 feet. The entrance lies through a grand gateway on the east, flanked by two lofty square towers, having the sides inclining inwards, from the base to the summit. A noble ditch faced with masonry surrounds the whole, measuring in the broadest part two hundred and twenty feet across. From the centre of the fort rises a huge square bastion or cavalier supporting a flag staff. This feature, combined with the loftiness of the battlements on the river face, give to the edifice an imposing, castellated appearance, so much so that the whole when seen from the opposite bank of the Mahánadi, presented to the imagination of Mr. La Motte, who travelled through the province in 1767 A. D. some resemblance to the west side of Windsor Castle. No traces of the famous palace of Raja Mukand Deo nine stories in height, mentioned in the Ayin Acberi, are to be found within the walls of fort Barabati, but the fragments of sculptured cornices, &c. which have been dug up at different times, and more especially a massive candelabra, or pillar furnished with branches for holding lights, formed of the fine grey indurated chlorite or pot stone, are probably the remains of some large and splendid edifice.

The only Mohammedan monuments worthy of notice at the capital, are a small neat mosque built by Ikram Khan, a governor during Arangzeb's reign, towards the centre of the town, and the Kadam Rasool, an antique looking edifice standing in the midst of a fine garden, which contains certain reliques of the prophet commissioned from Mecca by the Newab Nazim Shújaa úd Dín Khan, or his son Mahommed Taki Khan, the latter of

* The lines are as follows: زهاتف بپرسید تاریخ گفتا رگوناته دروازه قایم مدام

whom lies buried within the enclosure. The Mogul and Marhatta Subadars always resided in the palace of the Lal Bagh on the banks of the Cajorí, which we must suppose to be the " Stately Court of Malcandy," (whatever that word may mean,) described by Mr. Cartwright who visited the " Governor of *Coteke*" in 1632, though there are no traces of splendour remaining to warrant the high wrought description of the palace, given in Bruton's narration.

The Town of Cuttack contains a population of about 40,000 souls, residing in 6,512 houses, exclusive of cantonments, amongst which are several fine mansions of stone that belonged formerly to the Gosain and Parwar merchants, who engrossed all the trade and principal official employments of the province under the Marhattas. It is divided into a number of Mehallas and Bazars, named after the Sirdars who founded, or the trades or classes residing principally in them, as the Tatar Khan, Alí Shah, Uria, Telinga, &c. Bazar. The Chandni Chouk is a fine broad street, consisting of neat stone houses disposed with much regularity, but owes its respectable appearance chiefly to European interference. There is of course no deficiency of small modern temples in and about the town, amongst which that dedicated to Sita Ram is the most conspicuous both in size and form; and from its existence having been officially recognized by the British Regulations, vide Section XXX. Regulation XII. 1805.

Balasore, distant about 105 miles from Cuttack, is a large straggling town, containing several small brick houses inhabited by merchants, who carry on an inconsiderable traffic with Calcutta. Its situation is extremely unfavourable, on a low dreary plain, deformed by numerous unsightly ridges and ant hills, near the muddy banks of the Búra Balang, and it is considered in consequence unhealthy during the rainy season. The number of inhabitants does not exceed 10,000. Balasore is nevertheless the principal port of the district, and is provided with dry docks on the banks of the river, to which sloops, drawing not more than fourteen feet water, can be floated during the spring tides. It is frequented chiefly by three descrip-

tions of country craft, viz. Maldive vessels, the boats employed in transporting the Company's salt to the presidency, and a class of sloops built at Contai and Hidgelly called Holas, which come in great numbers during the cold weather to carry off rice to Calcutta.

The importance formerly attached to this station, in the infancy of the commerce between the western hemisphere and Bengal, is attested by the remains of the factories of four European nations, English, French, Danish, and Dutch. Traces of a Portuguese establishment are also to be observed, in the ruins of a small Roman Catholic Chapel within the town, having a wooden cross over the principal doorway. The Dutch seem to have been settled here prior to 1660 A. D.; at least that date is discoverable on two curious monumental pyramids of masonry, which rise near the factory. We know that the English formed their first Bengal establishment at Pipley on the Subanrekha in 1640 A. D. and the date 1684 A. D. is to be observed on a tomb in the English burying-ground at the place. The magnitude of the Company's establishment here, may be estimated from the number of large obelisks and obituary columns still standing in the burying-ground, erected to the memory of our predecessors who ended their days in this remote corner. The English had likewise a fine country house surrounded with gardens, at a place called Balramgerhi near the sea, the remains of which may still be seen, and will always be viewed with interest from its having afforded a temporary shelter to several of the Company's servants, when Calcutta was captured by the armies of Seraj úd Dowlah in 1756 A. D.

The trade of the place was important formerly, from the Sannahs and fine Muslins manufactured there, and likewise at Badrak and Soro, the demand for which has now almost entirely ceased. The drugs and dies imported from the hills, may have constituted also a considerable article of export. Balasore however, doubtless, derived its principal consequence as the site of a factory, from its convenience for carrying on a commerce with Bengal Proper, before permission had been obtained to establish settlements within that province itself.

The town of Púrí Jagannáth owes its size and importance entirely to its connection with the temple. It contains 5741 houses. Every span of it is holy ground, and the whole of the land is held free of rent, on the tenure of performing certain services, in and about the temple. The principal street is composed almost entirely of the religious establishments called Mat'hs, built of masonry, having low pillared verandas in front, and plantations of trees interspersed. Being very wide, with the temple rising majestically at the southern end, it presents by no means an unpicturesque appearance, but the filth and stench, the swarms of religious mendicants and other nauseous objects, which offend one's senses in every part of the town, quite dispel any illusion which the scene might otherwise possess. Fine luxuriant gardens and groves enclose the town on the land side, and produce the best fruit in the province. The stately and beautiful Callophyllum Inophyllum, called by Dr. Ainslie the Alexandrian Laurel, grows here in great abundance, and the Cashew-nut thrives with peculiar luxuriance. The environs exhibit some fine tanks, as the Indra Daman, Chandan, Márkandeswar Talao, &c. which are supposed to be very ancient; and the inquisitive stranger who may be disposed to explore amidst the sand hills situated between the sea and the S. W. face of the town, will find many ancient and curious looking religious edifices, nearly overwhelmed with sand, to excite and reward attention.

The climate of Jagannáth, is the most agreeable and salubrious probably in all India, during the hot months from March to July. At this season the south-west monsoon blows from the sea in a steady and refreshing breeze, which seldom fails until the approach of the rains, and every door and window is thrown open to court its entrance. A visit to Jagannáth has in some cases proved as beneficial to the European constitution, as a sea voyage.

Manufactures, &c.

The Manufactures and Trade of Orissa Proper are very inconsiderable and unimportant. A sufficiency of the coarser cloths is made for the use of the inhabitants, in all parts of the district. The Calicoes of Balasore, Soro,

Badrak, Janjipur and Hariharpur, were once much prized and sought after under the name of Sannahs, but the demand for the finer fabrics of that description having long since greatly declined, the quantity now manufactured is very trifling. At Píply Niur a good sort of quilt is made.

The province must certainly, a century or two since, have afforded some encouragement to the resort of European traders, as besides the large establishment at Balasore, the English had inferior factories or kothis at the town of Cuttack itself, and at Hariharpur, a village between that station and the sea. At present the whole value of the exports and imports, which pay duty, is only Sa. Rs. 2,97,285, and the customs and transit duties collected at the several small ports and inland chokies from the Subanrekha to the Dhamra river, do not exceed Sa. Rs. 30,000 per annum. The exports liable to duty are as follows :—Piece goods, bees wax, iron, kut'h (the inspissated juice of the khayar or mimosa chadira,) oil, lac, stone plates, sal timber, congní wood, kúrbeli, shúrbeli and petty articles.

A considerable exportation of rice takes place from the several small ports along the coast to Calcutta. The horned cattle and swine of the district also are carried out in large herds for the supply of the presidency market. The quantity of salt now transported from the district by private individuals, in the course of legal and open traffic, does not perhaps exceed 20,000 maunds annually ; but formerly salt was an important article of export by way of the great road leading along the Mahánadi to Sembelpur and Berar, and likewise by that of the Bamangati pass in Moherbanj, more than three lacs of maunds being exported annually. The dried fish and prawns of the Chilka lake may be noticed as an article of traffic, between the inhabitants of the hills, and those of the low country in that quarter.

Piece goods, silk, good tobacco, and every thing in the shape of a luxury, are imported from the adjoining districts of Bengal, and a small supply of couris, cocoanuts, coral, and dried fish is obtained from the few Maldive vessels, which resort annually to Balasore and Dhamra, to take on board cargoes of rice and earthen pots.

Casts, Manners, Population, &c.

The four great tribes into which the Hindu part of the population is divided, are of course the same in Orissa as elsewhere, and have the same origin ascribed to them. The ordinary casts and professions of the province are known by the name of the thirty-six Páthaks "*Chattís Páthak*," the individuals composing which are all either Súdras, or of what is called the "Sankara Verna," that is, a mixed impure race, proceeding from the promiscuous intercourse of some of the four tribes in the first instance, and again from their commerce with the descendants of such a connection, or the indiscriminate cohabitation of those descendants amongst one another. Páthak signifies literally a learner, it being the duty of the whole of these casts either to perform service to the three higher tribes, or if they cannot gain a livelihood in that way, to *learn* the various arts and trades which are useful to Society.

Of the Utcala Brahmins, I shall speak more particularly below. The proper, genuine Khetris, are I believe considered to be extinct, and those who represent them are by the learned held to be only Súdras. There are eight classes or families who claim to represent the military and regal tribe, known by the affixes or titles of Dhir, Dhal, Towang, Mal, Bhanj, Raï, Ráwat, and Khandait. The only professions of the pure Vaisya or Byse tribe, in Cuttack, are the two classes of Baniyas called the Gandha Baniya or druggist, and Swerna Baniya or money changer. The following are considered apparently genuine Súdras, viz. The Gowala (Gopa) milkman; Bhandári (napita) barber; Gowria (Gourakara) vender of sugar; the Chasa (Krishakara) or husbandman; and the Tálica or seller of Areca nut. The designation of *Or* or *Odra* is applied as it were *par excellence* to the class of husbandmen, who are commonly called Or Chasa. Such of that tribe as perform the duties of Paiks in the hills, and of sirdar village watchmen in the plains, are called Or Paik and Or Khandait.

The first set of the mixed casts or (Sankara Verna) springing from intermarriage of original tribes, chiefly Byse and Sooder, and which with excep-

tion to the two last, rank next below the pure Súdra, is composed as follows, viz.

Ooria	*Sanscrit.*	*Occupations.*
Málí,	Málácára,	Gardener.
Lohár,	Karmakára,	Iron smith.
Sankarí,	Sanc'hacára,	Worker in shells.
Tantí,	Tantraváya,	Weaver.
Kúmhar,	Cumbhacára,	Potter.
Kansárí,	Cansacára,	Brazier or rather worker in bell metal.
Barhai,	Sutracára,	Carpenter.
Chitrkár,	Chitracára,	Painter.
Sonár,	Swernacára,	Goldsmith.
Kewat,	Caiverta,	Fisherman.
Bed,	Vaidya,	Physician.
Maintí,	Carana,	The Writer or Secretary class.
Bawarí,	Berbera, or Berber,	Labourers.
Chandál,	Chandála,	performs the lowest and most degrading offices.

The last mentioned, the Chandál, is described to be the offspring of a Súdra father and Brahmin mother, and is considered here as elsewhere, to be the most degraded of the human species. Some make the founders of the first nine trades to have sprung from Viswakarma by a Súdra woman; and the physician they derive from the cohabitation of the god Aswinikumar with a Brahmin female. The Pathariya or stone cutter and Kutwya or sawyer are likewise introduced into some enumerations, as forming separate trades, of the same origin with the carpenter and iron smith.

A second set is derived from the promiscuous intercourse of the above casts with each other, and are as follows:

Ooria.	*Sanscrit.*	*Occupations.*
Teli,	Tailica,	Oilman.
Tiür,	Tivara,	Fisherman.
Chamar,	Charmacára,	Leather dresser.
Sundi,	Sundika,	Wine seller.
Dhobi,	Rajaka,	Washerman.
Magora,	Vyadhi,	Huntsman.
Naik,	Jyotishi,	Astrologer.
Shewala,	Madhuka,	Confectioner and toddy seller.
Dom,	Dombha,	Matmaker.
Patra,	Pátucara,	Cloth seller and weaver.
Tula Bhania,	Tula Bhedara,	Cotton beater.
Kandra,	Danda Pasika,	Village watchman.
Chúnárí,	———	Lime maker.
Pandra or Pan,	———	Cane maker.
Shiputi,	———	Taylor.
Baldia Teli, Chiria Mar, Bindhani, Hári,	———	Perform the lowest offices.

In some lists, the Rúpácára or maker of gods, appears amongst the mixed classes, as the follower of a separate trade, but I cannot learn how he ranks, compared with others of the degraded class. The Patra or cloth seller and weaver, branches out into the following subdivisions, viz. Sakuli, Pangani, Hansi, Matia, Ashti, Gola, Sara, Bona; and the fisherman as follows, Rarhi, Khatwa, Newulea, Kartiya, Gokha and Panua. The three tribes called Dom, Pan, and Hári, furnish the village musicians. They are termed in Sanscrit Antavasi, or those who live in the most abject state.

The remaining caste are the wild tribes of the hills, called Kole, Khand and Sour by the Oorias, and in Sanscrit "*Pulinda*" (a word signifying mlechcha and barbarian) who scarcely belong to the great Hindu family.

The Odra or Utcala Brahmins, are one of the ten original races of Saca Dwipa Brahmanas, taking their names from the countries which they inhabit, viz. Gaura, Saraswati, Canyacubja or Cannouj, Mait'hila, *Utcala*, Tailanga, Carnata, Maharashtra, and Dravira. Their duties are said to be *Yajana*, *Adhyayan*, and *Dan*, or sacrificing, reading the Vedas, and giving alms; and their regular means of subsistence *Yájan*, *Adhyápan* and *Pratigraha*, or officiating at sacrifices, teaching the Vedas, and receiving charity. If they cannot gain an adequate livelihood by the regular modes, they may eat at a feast in the house of a Súdra, or receive charity from one of that class; also they may cut firewood from the hills and jungles, and sell it. Should these resources fail, they may, after fasting for three days, steal a little rice from the house of a Brahmin or any other, in order that the king hearing of their distress by this means, may assign something for their maintenance. Should all these expedients prove insufficient, they may engage in the duties of the Cshatriya and Vaisya, but as soon as they have collected a little property, they must repent and return to their original occupations. The Brahmins who confine themselves to the six duties and employments above noticed, are of course the most honoured and esteemed. Inferior Brahmins are those called Devalaca, and Grama Yájaka, who attend the village gods, and perform funeral obsequies for hire. There is another class known commonly in Orissa by the name of Mahast'han or *Mastan* Brahmins, who form a very considerable and important class of the rural population. Besides cultivating with their own hands, gardens of the kachu (Arum Indicum), cocoanut, and Areca, and the piper beetle or pan, they very frequently follow the plough, from which circumstance they are called Halia Brahmins, and they are found every where in great numbers in the situation of Moqeddems and Serberakars, or hereditary renters of villages. Those who handle the plough glory in their occupation, and affect to despise the *Bed* or Veda Brahmins, who live upon alms. Though held in no estimation whatever by the pious Hindu, and although not free from some of the vices of the Brahmin character, viz. audacity, stubbornness and mendacity, they are unquestionably the most enterprizing, intelligent, and industrious of all the Company's ryots or rent-

ers of malguzari land, in Orissa. Their moral and intellectual worth indeed, seems to rise exactly in proportion to their emancipation from those shackles of prejudice and superstitious observances, which narrow the minds, and debase the natures of the higher and orthodox class. I have not been able to trace satisfactorily the origin and history of these Mastan Brahmins, who I am informed resemble exactly the cultivating Brahmins of Tirhoot and Behar, but the point is one well worthy of investigation.

Character, Manners, &c. People of the plains.

The Oorias as a nation are justly described by Abul Fazl to be very effeminate, that is they are extremely deficient in manly spirit, their figures are slight and delicate, and the costume of the males has little to distinguish it from that of the females, except the different manner of wearing the cloth fastened about the loins. They are moreover equally ignorant and stupid. Orissa might be termed the Bœotia of India, with reference to the intellectual dullness of its inhabitants, as compared with the people of any other province. A striking proof of the estimation in which their capacity has been ever held, is the fact, that in all ages and under all governments since the downfal of the Orissan monarchy, the principal official employments throughout the province have been engrossed by foreigners--by Bengalees, north, and Telingas, south of the Chilka Lake—owing I really believe in a great measure to the difficulty of selecting from its indigenous population, persons properly qualified for trusts of difficulty and importance. The mass of the people are little prone to the commission of crimes of a daring and heinous character, as might be inferred from the feminine spirit above ascribed to them; but they are well versed in all the arts of low cunning, dissimulation, and subterfuge, and the love of intrigue forms a prominent feature in their character, however clumsy many of their attempts to mislead or circumvent. Their manners are sufficiently dissolute, a failing not to be wondered at considering the obscene character, and impure symbols, of the demoralizing religion which they profess. In justice however to the bulk of the agricultural population it must be said that the *ryots* of Cuttack are extremely industrious, though they work with little spirit or intelligence, and altogether the Oorias of the plains, whatever

their faults, are certainly the most mild, quiet, inoffensive, and easily managed people in the Company's provinces. They furnish too a valuable class of servants known as the Balasore bearers, in whom the virtues of fidelity and honesty (according to their own conception of those qualities) are conspicuous.

Population of the hill countries.

The inhabitants of the hills, and of the jungles on the sea shore, differ chiefly from the population of the Mogalbandi, in that they are more shy, sullen, inhospitable, and uncivilized than the latter. Their chiefs, the Khandaits or ancient Zemindars of Orissa, who claim to represent the regal and military class, are grossly stupid, barbarous, debauched, tyrannical, and slaves of the most grovelling superstition. Whatever the cause of the degradation ascribed to them in a very curious passage of the Institutes of Menu, if *subjection to Brahmins* could redeem their lost dignity, they have long since entitled themselves to the recovery of their station amidst the four great classes of the Hindu nation. The passage above alluded to is this, "The following races of Cshatriyas by their omission of holy rites, and by "*seeing no Brahmins*, have gradually sunk amongst men to the lowest of "the four classes, viz. Paundracas, *Odras** and Draviras, Cambojas, *Ya-*"*vanas* and Sakas; Paradas, Pahlavas, Chinas, Ciratas, Deradas, and "Chasas." The Paiks or landed militia of the Rajwara, combine with the most profound barbarism, and the blindest devotion to the will of their chiefs, a ferocity and unquietness of disposition, which have ever rendered them an important and formidable class of the population of the province. They comprehend all casts and classes, chiefly perhaps the Chasa or cultivating tribe; occasionally individuals of the lowest casts are found amongst them, as Kandras, Pans and *Bawaris* (Sanscriticé Berber or Barbarians :) and the fashion has often prevailed of adopting into their order some of the more savage inhabitants of the remote hills, called Kands, as also even Mussulmans and Telingas. It is well known that they are paid by service lands, which they cultivate with their own hands in time of peace,

* Oorias.

subject to the performance of military and rude police duties whenever called upon by their chiefs. Abulfazl states the number of Paiks or zemindari militia (in the original, Sipah-i-zemindari) liable to be required for the service of the state according to the conditions of the tenure of the zemindars, at about 1,55,000 for the present districts of Cuttack and Midnapore, which probably formed but a small part of the entire force maintained by those chiefs. The Paiks of this part of the country are divided into three ranks distinguished by names taken from their occupations, or the weapons which they use chiefly, viz.

1st. The Pahris, who carry a large shield made of wood covered with hides and strengthened by knobs and circles of iron, and the long straight national sword of Orissa, called the khanda. They are stationed chiefly as guards.

2nd. The Banüa, who use the matchlock principally now (in lieu of their old missile weapons), but have besides a small shield and sword. It was their duty to take the field principally and go on distant expeditions.

3rdly. The Dhenkiyas who are armed with bows and arrows, and a sword, and perform all sorts of duties.

The war dress of the *Paiks* consists, or did consist, of a cap and vest made of the skin of the tyger or leopard; a sort of chain armour for the body and thighs; and a girdle formed of the tail of some wild animal. Besides the terror inspired by these unusual habiliments, they farther heightened the ferocity of their appearance by staining their limbs with yellow clay, and their countenances with vermillion, thus exhibiting altogether as savage and fantastic an air, as one can well conceive to invest the national army of any country or people. However wild and motley their appearance and composition, they certainly did not fight badly, when encouraged at least by the proximity of their jungles, since we find them con-

stantly sustaining the most bloody battles with the Moguls, and it may be doubted whether they were not superior to any infantry which the Berar Marhattas ever brought into the field during their government of the province.

Exclusive of the regular Ooria population of the Brahminical persuasion, there are three remarkable races inhabiting the hilly region (noticed above under the general designation of Pulinda or barbarous mountaineers) which merit a separate description in this place, I mean the Coles, Kands and Sours. They are quite distinct, the two former at least, in language, features, manners, and religion from the Hindus of the plains, and the supposition seems plausible that their ancestors may have been the aboriginal inhabitants of the country, prior to the arrival of the Brahmin colonists from the north who now possess India. No such tradition or belief however exists in the province. These three tribes should perhaps be considered merely as branches of the same original stock, but as the offsets, if such they are, are found under different names and circumstances in different parts of the province, it will be convenient to mention them separately.

The Coles are divided into thirteen different tribes, viz. Kol, Lurka-kol, Chowang, Sarvanti, Dhurowa, Bahúri, Bhúnian or Bhúmiah, Khandwal, Santal, Sour, Bhúmij, Batholi and Amavat. Their original country is said to be Kolant Des, which the natives describe as a hilly tract lying between Moherbanj, Sinhbhúm, Jynt, Bonye, Keonjher and Dalbhúm. They have however for many years gained possession of parts of Chota Nagpore, Jaspur, Tymar, Patcúra and particularly of Sinhbhúm ; their encroachments upon Moherbanj have been felt as serious ; some tribes (the Bhúniahs) are found settled in the back parts of Nilgiri, and from their restless disposition and constant endeavours to extend their possessions, they have proved troublesome neighbours even to the powerful Keonjher Raja. The Coles are a hardy and athletic race, black and ill favored in their countenances, ignorant and savage to the last degree, but their houses, built entirely of wood, are said to exhibit

a considerable degree of neatness and comfort, and they carry on a very extensive cultivation. Their arms are the bow and arrow, and a small iron battle-axe called *Tangi*, in the use of which they display much spirit and dexterity. This people own none of the Hindu divinities, and indeed seem scarcely to have any system of religious belief whatever, but four things are held by them in high veneration, the Sahajna tree (Hyperanthera Morunga,) paddy, oil expressed from the mustard seed, and the dog. In all their contracts and negociations, the leaf of the former is always introduced, and they rub each other with oil which is considered to give solemnity to the proceeding. They have also a curious method of striking a bargain or concluding a pacification, which will not fail to remind the classical reader of the origin of the word *stipulation*. I allude to the circumstance of their breaking a straw (stipula) between the disputants, a practice which always follows or precedes the final adjustment of any compact. The Coles are passionately fond of fermented liquors, and eat all kinds of flesh and grain, as well as various roots which grow spontaneously in their jungles called the Buenjkarba, Charmika, Tanka, Pachali, Páni Alu, Massia and Mánkachu. The flesh of the hog is particularly prized by them, so much so that every house of the Coles almost is said to have the appendage of a piggery. They are governed chiefly by numerous petty sirdars, or heads of villages, called Manki and Munda, but acknowledge allegiance, and in some cases pay tribute, to the hill zemindars in whose countries they are settled.

The Kands are found in great numbers in all the hill estates south of the Mahánadi. They form the principal part of the population of Killah Ranpur which has thence been called the Kandreh Dandpat. The natives also have the idea of a district situated between Daspalla, Boad, and Gúmsir, inhabited entirely by this tribe of hill people which they call *Kandra*. I believe that the vast unexplored tracts of mountain and forest lying at the back of the Ganjam and Vizagapatam hill estates, down as far as the Godaveri, are peopled chiefly by Kands in a very savage

state, who differ little probably from their neighbours the Gonds, though Captain Blunt observes on the authority of the Jaghirdar of Malúd and Manickpatam, (vide Journal of his route from Chunar to Yertnagoodum), that the Coands and Goands are to be considered quite distinct races.*

The Sours are found chiefly in the jungles of Khúrda, from Banpur to Cuttack, and in the woods of Atgerh, Daljora, &c. which skirt the foot of the hills for some way to the northward of the Mahánadi. They are in general a harmless, peaceable race, but so entirely destitute of all moral sense, that they will as readily and unscrupulously deprive a human being of life, as any wild beast of the woods, at the orders of a chief, or for the most trifling remuneration. Thus during the insurrection which prevailed in Khúrda, they were the agents employed to carry into execution most of the schemes of revenge planned by its instigators, whenever helpless individuals were to be the sacrifice, and the quantity of blood shed by the hands of these ignorant savages without motive or remorse, during the above period of anarchy and disorder, is almost incredible. In ordinary times they are considered very useful both by the zemindars and villagers, in clearing the jungles and providing fuel which are their chief means of gaining a subsistence. They likewise collect the produce of the woods, and dispose of large quantities to the druggists and fruit sellers, in the neighbouring bazars. They are distinguishable from the other natives of the province, by their inferiority of stature, mean appearance, and jet black colour, as well as by an axe for cutting wood, the symbol of their profession, which they always carry in their hand. Their language little resembles that

* The passage is as follows : " Having afterwards heard of a people who in the northern Sircars are called Coands (Kands) and whose depredations into those provinces are attended with similar acts of cruelty, I naturally conceived them to be the same tribe, but in a conversation with Kumal Mahommed, the officer in charge of the Marhatta Pergunnah of Manickpatam, and who appeared to be well acquainted with the different tribes of mountaineers subject to the Berar government, he informed me that these are a different race from the Goands. The latter he said are much larger men, and had in many instances been made good subjects, but the Coands are inferior in stature and so wild, that every attempt which had been made to civilize them had proved ineffectual."

spoken by the Oorias, and is scarcely intelligible to any but themselves. They are said to worship certain rude forms of Devi and Mahadeo or rather the Hindus so interpret the adoration paid by them to a few natural objects, as stumps of trees, masses of stone, or clefts in rocks, in which an impure imagination may discern some resemblance to the human organs of generation. Some are fixed in small villages called Sour Saïs; others lead a migratory sort of life, clearing annually spots in the jungle, where they erect huts of sticks, leaves, and grass, and sow different sorts of grain of the Millet kind, as the Jooar, Bajereh, Makye, Mandea, &c. which sprout up with extraordinary luxuriance in such situations. They will eat almost any kind of food, whether animal or vegetable. A great part of their subsistence is derived from the roots and produce of the jungles. The flowers of the Madhúka (Bassia latifolia), and the Keora,* yield them an intoxicating liquor; in lieu of rice they consume the seed of the bamboo, a very heating and indigestible food; the wild yams, arums, and other roots furnish a nutritious, and not unwholesome substitute for bread; and for a desert they have the wild mangoe, the fruit of the Bela every where abundant, and the seeds of the Bauhinia racemosa, served up on the large ribbed leaf of the Ravya (apparently a species of Dillenia), which answers the purposes of a dish.

The author of the work called the Kholaset ul Towarikh, places in the neighbourhood of Orissa, the country called the Triya or Strí Raj, where females (not amazons) exercise the powers of government, and have the upper hand in society, and in the management of all affairs. As the fable of the existence of such a country in this part of India seems to be a purely gratuitous invention of the Mahommedan writers, and is not supported either by the histories or the current belief of the natives of the province, I shall not here stop to inquire into its meaning and origin.

The language of the *Or* or *Odra* nation is a tolerably pure Bhasha (dialect) of the Sanscrit, resembling closely the Bengali, but far remote ap- Language.

* Pandanus odoratissimus.

parently from any affinity with the Telinga. Most of the titles of which the natives are so fond are pure Sanscrit; more than three-fourths of the nouns and roots of verbs may be traced to that language, and its few simple inflections are obviously founded on the rules of the Vyakaran. The basis of the alphabet is the common Hindi or Nagari character, somewhat disguised however by a peculiarity in the mode of writing it. In the direction of Bengal, the Ooria language is used tolerably pure, following the line of the coast as far as the Hijellee and Tumlook divisions at least, I have been credibly informed that in the Mysadal Pergunnah, all revenue accounts are written on tál patr or leaves of the palmyra tree in that dialect. On the western side of the Midnapore district, the two languages begin to intermingle, at Rani Sarai about twenty miles north of the Subanrekha. A very mixed and impure bhasha is used in the Zemindari of Naraingerh and the hill estates beyond it, which improves a little at Midnapore (itself situated in a Jungle Mehal called Bhanjbhúm) and at that town becomes more decidedly Bengali. The inhabitants of the country on the north of Keerpoy (officially termed the Jungle Mehals) probably speak the language of the Bengal province quite correct and unmixed. To the westward the Gond and Ooria languages pass into each other on the estate of Sonepur, the Raja of which country informed me that half his people speak one and half the other dialect. On the south we find the first traces of the Telinga about Ganjam, where a different pronunciation may be observed. The people there call themselves *Oodiahs* and *Wodiahs*, instead of Oorias, Gerh becomes Gadda, Jagannáth, Jagannáda, &c. The language of Orissa Proper still however prevails at Baurwah forty-five miles south of Ganjam, on the low lands of the coast, and as far as the large estate of Kimedy in the hills, beyond which the Telinga begins to predominate, at Cicacole is the prevailing dialect, and in Vizagapatam, Telinga only is spoken in the open country. In the mountains of the interior, however, the dialect of the Odras is used by the bulk of the inhabitants, from Gumser down to Palcondah, Bastar, and Jayapur.

I know of no original composition deserving any notice in the language

of Orissa, excepting the Epic Poem called the Kanji Kaviri Pothí which celebrates the conquest of Conjeveram, one of the most distinguished events in the modern history of the country. There is no deficiency however of translations of the more esteemed writings of the great Hindu authors, both religious and scientific, and every temple of importance has its legend or Sthán Puran, every almanack maker his Pánji, and Bansábali, composed in the local tongue.

Estimate of the population.

In estimating the amount of the Population of the Cuttack Province I shall begin with candidly confessing, that we have no means of forming even a tolerable guess at the number of inhabitants in the hill countries. Information on that subject could be procured only from the hill Rajas or Zemindars, and such are their jealousy, contumacy, and untractableness, that we might be sure, even if they condescended to furnish any returns at all, they would be entirely false. The estimate given below for the Mogulbandi, and that portion of the Rajwára which lies between it and the sea, though mostly conjectural, is founded upon data of a nature which warrant some confidence in its accuracy. The total of villages has been tolerably well ascertained from the returns made by the Police Officers at different periods. To be enabled to strike an average for the number of houses and inhabitants, I have obtained Khaneh Shumari accounts, on which I can depend, for a few Pergunnahs, both at the northern and southern extremity of the district, and in the central parts. The results deducible are as follows :

The eighteen Police Thanas* of the Mogulbandi including the Rajwára estates of Aul, Kanka, Kujang, Herispur, Marichpur, and Bishenpur, with the whole of the smaller Killajat, contain 11,915 villages (Mouzahs and Patnas) and 243,273 houses, exclusive of the towns of Cuttack, Balasore, and Púrí. This enumeration yields an average of about twen-

* They are thus named ; Basta, Balasore, Soro, Chúráman, Badrak, Mattu or Talmal, Janjipur, Patamandri, Asserassar, Arackpur, Cuttack, Puharájpur, Taran, Hariharpur, Gope, Piply, Púrí or Pursottam, Khúrda, and Bánpur.

ty houses to a village, which although low compared with the Bengal average, is corroborated by actual observation of the very small size of such villages of Orissa as ordinarily meet the eye. In the three northern Thanas which comprize the poorest and most unproductive portion of the Mogulbandi, the average is scarcely nineteen; in the twelve central ones it is nearly twenty; and in the three southern ones which contain the Pergunnahs adjoining Púrí, filled with the large villages of the Sásan Brahmins, it is thirty.

Again, in the first mentioned division, the ascertained number of inhabitants, men, women, and children in 1678 houses is 9576; yielding an average of rather more than five and two-third inmates for each house. In the second, 5,758 houses have been found to contain 27,643 souls, or on an average nearly four and four-fifths per house. In the southern division, 19,930 houses have been ascertained to hold 1,30,871 inmates, viz. men 33,518, women 33,903, infants 36,450, that is five and a fraction of about one-fifth per house. Adverting to these data which have been prepared with much care and accuracy, more especially in the Southern division, an average rate of five per house, for the whole district, would not appear too high. On this calculation, the entire population of the district will stand as follows:

Village Inhabitants (2,43,273 × 5) - - - - - - - - - -	12,16,365
Population of the town of Cuttack, - - - - - - - - - -	40,000
——————— town of Púrí, - - - - - - - - - -	30,000
——————— town of Balasore, - - - - - -	10,000
Total	12,96,365

The area of the tract now under consideration, has been estimated with tolerable accuracy at about 9,000 square miles, by counting the squares into which Captain Sackville's map is divided. The result of the above calculation therefore gives to the open and cultivated part of Orissa, a population of 135 souls per square mile. That the estimate for Cuttack

should fall much below that suggested for Bengal, viz. 203 per square mile, will not surprise those who have attended to the picture drawn in the preceding part of this paper, of the general poverty of the people, and the paucity of large towns and villages.

The statements for the Pergunnahs Raheng, Seraen, Choubiskúd, Uldhar, and Rorang, which are by far the most to be relied on, yield the following proportions of the principal classes, viz.

Total number of Householders,	19,930
Chasas* or Husbandmen,	7,432
Brahmins,	3,565
Mahtís, (Carana or Writer cast,)	611
Gowalas, (Cowherds),	537
Baniyas, both Druggists and Shroffs,	232
Artisans, Manufacturers, Shopkeepers, &c. of all sorts excepting the above,	4,887
Low casts as Fishermen, Kandras, Pans, Bawaris, Chandál, &c. who furnish common labourers, coolies, village watchmen, &c.	2,420
Balance composed of Mussulmans, foreigners, mendicants and casual residents,	246

It will not be altogether uninteresting to compare the estimate here attempted of the population of Cuttack, with the sales of salt for the supply of the district. Salt is sold on the part of government at several golahs or store-houses in the interior, in quantities of not less than one maund, at the fixed monopoly price of Sicca Rupees two per maund, increased by charges of transportation, storing, commission, &c. which raise the price according

* It should be observed, that although the Chasas are the proper cultivating caste of Orissa, many of the other classes, tenant land, and pay revenue as ryots.

to circumstances to from 2 Rs. 3 As. to 2 Rs. 6 As. per maund, at the golahs. The average retail rate varies from about 2 Rs. 8 As. to 3 Rupees per maund. This system of supply has been established only since the beginning of 1818. During the last four years, the average of the public sales for consumption within the Mogalbandi, has been 2,00,000 maunds. Mr. Colebrooke considers the quantity of one-fourth of a chittack per diem to be an ample allowance for an inhabitant of Bengal. In Cuttack, an allowance of half a chittack is insisted upon by the people themselves as the usual average, when salt was cheap; and the larger individual consumption of the article in this district, is explained by a reference to the peculiar diet of the people, the villainous insipidity of which must necessarily require to be relieved by an additional mixture of salt. Abulfazl has observed of the Oorias, "After boiling their rice they steep it in cold water and eat it the second day." This stale and unpalatable species of food is still universally used under the name of *Panbhatta*. As the enhanced price of salt under the British government, which certainly amounts to from 400 to 500 per cent, may have somewhat reduced the former consumption by the poorer classes, that is the mass of the community, we shall perhaps arrive near the truth by taking a medium between the Cuttack and Bengal allowances. Some deduction too must be made on account of children under ten years, whose numbers, adopting the average suggested by the Raheng returns, may be estimated at about one-third of the whole population. The calculation of the quantity necessary for the Cuttack people will then stand as follows in round numbers:

Eight and a half lacs of adults, at between one-fourth and one-half chittacks per diem, consume annually - - - -	*Mds.* 1,75,000
Four and a half lacs of infants, at rather less than one-fourth do.	*Mds.* 56,200
Total consumption,	*Mds.* 2,31,200

The balance required of about 30,000 maunds, may very well be supposed to be obtained by smuggling, independent of the government sales.

The accounts remaining to us of the most important operation in modern Indian finance, Raja Toral Mall's settlement called the Taksím Jamma and Tankhah Raqmi, are as imperfect and deficient in Orissa as in every other part of India with which I am acquainted. There can be no doubt but that a *jarib* or measurement of the lands of the three sircars Jelasir, Badrak and Cuttack, was made, under the orders and superintendence of that distinguished minister, with what is termed the Báreh Dasti Padiká or rod of twelve spans, and all the Ruqbeh accounts in the offices of the Sudder Canúngos and their Gomashtehs, are stated to be founded on that measurement. The subsequent corrections and alterations that have taken place, are said to have been made only by *Nezer Andází* or guess work. What is curious, the standard of the bigah, which was originally uniform, is now found to be different in every part of the district, to such an extent indeed, that in some Pergunnahs the bigah is four times the size of that nominal measure in other divisions, and all the intermediate variations frequently occur. By what rule the other great step in the settlement was adjusted, viz. the determination of the rates of rent to be paid by the husbandmen for a bigah of each description, I can find no evidence or information whatever. Abulfazl in describing the Emperor's settlement for Hindustan generally, says, that an average of ten years' collection was struck.* But whether in this province which had then only recently been conquered from its Hindu sovereigns, and rescued from the destructive anarchy of the Bengal Afghans, the ancient rates were maintained, or heavier ones imposed, I cannot venture to offer any assertion. My general impression is that the fixed and regular assessment of the Moguls was heavier than that of the Hindu Rajas, but the indigenous princes of Orissa seem to have had so many methods of extorting a large revenue from their subjects, by extra demands, occasional requisitions, and irregular claims

Revenues.

* Vide Ayin Acberi, part 3. "For that purpose having formed an aggregate of the rates of collection from the commencement of the 15th year of the reign to the 24th inclusive, they took a tenth part of that total as the annual rate for ten years to come."

under various heads and pretexts, that the burthens of the ryot may be presumed to have been pretty much the same under either administration.

It is impossible to reconcile with any known or probable standard of collection, or any conceivable state of cultivation in the province, the account given in the Ayin Acberi and other works on Indian finance of the old Jamma of Orissa. Abulfazl rates the assessment of the entire Súba at 1,60,733,237 dams, or rupees 40,18,330, and that of the sircars Badrak and Cuttack which comprized the modern district, reaching from the Subanrekha to the Chilka lake, at 11,012,050 dams, or rupees 27,53,015, exclusive of the tribute of the hill estates.

The Pére Thieffenthaler states the revenues as follows:

Selon Manouchi,	- - - -	Rupees 57,07,500
Selon le Registre,	- 14,282,100 Dams,	or Rupees 16,57,800

But he justly observes " En convertissant les Dams en Roupies la somme devient beancoup plus grande." It would be 35,70,525 Rupees, and I suspect that the amount in *Dams* is intended to represent the recorded revenues of the three Northern sircars, and that below, in rupees, the Jamma of all that remained of Orissa, as a separate province at the date of the entry in the register.

The statements of the Revenue of Orissa furnished by Mr. Grant in his Analysis of the Finances of Bengal, tally nearly with those above noticed. The substance of his remarks on this point are as follows. During the reign of Shah Jehan, between 1627 and 1658 A. D. Orissa was formed into a separate Súba, and the three sircars which remained under the imperial government were subdivided into twelve, as follows, viz.

		Rupees.	Remarks.
1. Cuttack, No. of Mehals, - 100	Assessed in Couris valued Mokurrery Tunkhah *Ruqmee* or Enrolled Standard of Assignment always for	33,81,023	*Inclusive* of the rated territories then in the hands of the Royal Family of Orissa and other tributary Rajas.
2. Barruah, - - - - - - 9			
3. Jajepore, - - - - - - 5			
4. Badshahnaggar, - - - 16			
5. Badrack, - - - - - - - 19			
6. Soro, - - - - - - - - 15			
7. Ramna, - - - - - - - 20			
8. Basteh, - - - - - - 10			
9. Jelasir, - - - - - - - 22	The most part bestowed in Jageer at	15,80,474	
10. Maljhettiah, - - - - 21			
11. Goalpareh, - - - - - 28			
12. Muzkuri, - - - - - - 11			
Total Mehals, 276		Rs. 49,61,497	

These "*included territories*" are afterwards stated to be thirty-two Mehals* yielding 8,73,518, of which the country under the Gajapati of Khúrda is valued at 6,15,616 Rupees. Deducting the latter amount from 33,81,023 Rupees, we have 27,65,407 Rupees which corresponds closely with the old valuation of the Ayin Acberi. This deduction must be borne in mind to enable the reader to understand Mr. Grant's subse-

* Vide Analysis, "It will be proper to deduct the valued rent of thirty-two Mehals yet unconquered or left in the possession of the Royal Family of Orissa and other tributaries though included formally in the Jamma, viz.

To Raja Dirb Sing Deo, heir of line and representative of the Royal House of Gajeputty, guardian of the Thakoor Dwareh or Jagannáth and proprietor of 11 Mehals dependent on Killah Khúrda,	6,15,616
Raja Mahinder of Killa Aul,	26,121
Ramchunder, &c. of Sarungurh	36,978
Sorbesur Bhunj of Bamunhatty,	80,875
Hurchunder of Derpun,	37,088
Persotum Bhunj of Ryntoo,	10,883
Rugonath Sund of Coojung,	9126
Raotra of Mudpore,	5921
Tegchund D'hol of Kerapore,	6470
Ram Sah of Nagpore, &c.	9705
Jagannáth D'hol of Chatora,	16,175
Mahomed Yaz Kasijurah,	2000
Girdhur Narain of Chowrassijurah,	6235
Bulbhudder of Mynajura,	4700
Naucar, &c.	5635
In all 27 whole and 5 Kismut Mehals,	8,73,518

quent remarks when he goes on to state that Aliverdi Khan ceded to the Court of Nagpore, country assessed with an old standard revenue of Rupees 25,73,583 and that in 1768-9 the bad management of the Marhattas had reduced the Jamma to 21,20,415 Rupees. It should be written 15,04,799, as the amount of 6,15,616 was quite a nominal entry. One half of this *rated* assessment, or about three lacs, was added to the Marhatta Jammabandi, according to Mr. Grant, on the final dismemberment of the dominions of the Khúrda Rajas under Raja Bír Kissore Deo.

The registered assessments of the Moguls, I believe to be much higher than the province ever really paid, but there seems little prospect of this discrepance between the entries and actual collections of the imperial government (which has been noticed in other parts of the country also) receiving a satisfactory explanation. In most revenue accounts, and especially in all the bills of sale of portions of a Talúkdari or Moqeddemi authenticated by the signature of the Sudder Canúngo, which are now forthcoming, *two* Jammas are always specified. First, the Tankhah Raqmi, which is the name given to Toral Mall's assessment, and is always very high, being in fact the registered assessment above noticed, computed in Rupees. 2nd. The Jamma Kamál which falls far below the other, and is specified in couris, the common currency of the district. The best informed natives declare that the Tankhah Raqmi was an imaginary over-rated valuation, at which the lands were formerly made over in Jageer or assignment to the Officers of the Mogul government. The word "*Tankhah*" (not Takeh or Tanka) certainly ordinarily means assignment, and Mr. J. Grant, a great authority on questions of Indian Finance, appears so to have understood it in the remark above quoted, "Moqurreri Tunkhah "Ruqmi or enrolled standard of assignment, being always for the most "part bestowed in Jageer," &c. &c. There is a passage likewise in the Ayin Acberi which strongly confirms the above view of the meaning of the terms. The author says, "When Asif Khan was Vizier, the Jumma of the country was *Raqmi* or computed, and he went on increasing the *Tankhahs* just as he thought fit, "Deran Hingam ki khajeh Abdul majid Ba Vi-

zarat sir belendi dasht, Jama-i-vilayet Raqmi búd, o uncheh ba khatir mi rusid Afzudeh *Tan* mi namúdand."

The *Jamma Kamál* is stated to be a subsequent revised assessment, formed, as some will have it, by an Officer called Kamal Mohammed, but others, with more apparent probability, explain the terms to signify the real and actual Jamma, according to which the collections were made in latter times, before the country had been ruined by the Marhattas. Mr. Grant applies the word to Jaffer khan's settlement, which he calls "*Jumma Toomar Kamil.*"

I shall now proceed to furnish abstract statements of the land assessment of Cuttack according to its present dimensions, translated from revenue accounts in the private possession of the family of the former Dewan of the Marhatta government, the authenticity of which I see no reason whatever to doubt, and it is on these only I should be disposed to rely, in forming any comparison between the former and present productiveness of the revenues of Cuttack.

Taksim Jamma of the Moguls.

Thirteen Sircars (including the Darul zerb or Mint one Sircar) contain, - - - - - - -	Mehals	297
Deduct Tehsil Bengaleh, or collected under Bengal, - -	Mehals	27
Remain,	Mehals	270

		Káhans.	*Pans.*
Tankhah Raqmi or Jamma of the above, -	Couris	59,61,499	8

Under the Marhattas.

Tashkhís Bhoonsla, or fixed and regular Jamma under the government of the Nagpore Raja, - -	Rupees	2,42,236	10
	Couris, *Káhans*	47,36,803	0

viz.	Rupees.	Couris. Káhans.
Mehalat and Thanehjat (Khaleseh Land,)	2,24,079 7 0	36,42,978
Tribute of the Zemindareh or Killajat Estates,	18,157 3 0	10,93,825
	Rupees 2,42,236 10 0	K. 47,36,803

Dákhil Sircar or remitted to the Raja's Treasury at Nagpore, calculated in Rupees of sorts, - - - -	6,00,000
Kharch Sipahan o ghyreh, expences of Troops and management do. do. - - - - - - -	9,00,000
Total Rupees	15,00,000

Equal (about) to Sa. Rs. 13,50,000.

The latter sum, or Sicca Rupees 13,50,000, may be assumed as the standard Revenue of Cuttack under the Nagpore Government, and was certainly the highest amount ever realized by the Marhattas from the district, though their assessments were sometimes rated higher. The collections indeed I suspect very frequently fell short of the above standard, more especially during the last ten years of the Marhatta administration. The proportions between the net expenditure, and the remittances to Nagpore, I take to have been in a great measure nominal.

The following are the results of settlements formed by different Subahdars, taken from authentic accounts which are still extant. Some indefiniteness must attach to the statements, from the uncertainty of the rate of exchange between couris and silver, which fluctuated to from three to four káhans per deh masha rupee, during the whole of the Marhatta administration.

The settlement of Sheo Bhat Sautra for 1167 A. is entered as follows

Gold Mohurs,		231	0
Rupees, of sorts,		3,82,829	8
Couris,	Káhans,	27,82,446	1

Another settlement by Sambha Ji Ganesh in 1178 A. is entered.

Ashrafis,		11	0
Rupees, of sorts,		5,01,394	15
Couris,	Káhans,	42,37,666	0

Another by Raja Ram Pandit.

Rupees, of sorts,		1,10,318	14
Couris,	Káhans,	53,37,685	0

Another by Inkaji Suk'h Deo.

Rupees, of sorts,		1,51,435	0
Couris,	Káhans,	57,78,224	0

On the subjugation of the province by the British government, in 1803, a rate of conversion of four káhans of couris per Sicca Rupee was assumed, and the revenues have been invariably demanded and paid entirely in silver, at least since 1807. The assessment of the British government has been raised by two successive and gradual augmentations, to the following amount, which is the recorded Jamma of the Amli year 1229.

Mogulbandi (exclusive of Pergunnah Pataspur, &c. assessed under the Marhattas, at Rs. 30,000) - - -	12,64,370
Killah Khúrda, held khás for political reasons, which paid latterly to the Marhattas a Peshcash of Sicca Rupees 10,000, -	61,169
Fixed tribute of thirty-one Khandaitis or Zemindaris of the Military Chiefs of Orissa, styled Rajas, - - -	1,20,411
Total, Sa. Rs.	14,45,950

The excess of regular receipts under the head of land revenue alone, may be stated at from one to two lacs per annum in favor of the British government, which increase may be fairly ascribed to the improved and more enlightened system of management now pursued. The country has unquestionably in the main prospered under our administration, though much suffering was long experienced in particular quarters from injudicious measures, the errors of which have been perceived and remedied: cultivation has greatly increased in every part: and if the ryot or husbandman has not benefited by the change of government, in proportion to the superior importance of that class of the community to which he belongs, and to the benevolent intentions of the legislature, his condition must certainly be considered on the whole better than it was under the native system, whilst the higher classes connected with the soil (now acknowledged as Proprietors) have undoubtedly attained to a state of comfort, independence, and comparative opulence, quite unknown at any former period of the history of the country.

The Revenue derived from the salt monopoly, exceeds the total amount of the land rents paid to the State, and is entirely the creation of the British government. The salt sold within the province yields a net return of about 3,00,000, and the quantity annually exported to Calcutta for public sale at the salt office, produces little short of from Rupees 15,00,000 to 16,00,000. Under the heads of customs, tax on spirituous liquors, and tax on pilgrims, a further net revenue of about one lac per annum is obtained by the present government. The value of Cuttack to the Company therefore, after deducting expenses of management, may be fairly assumed at upwards of thirty lacs of Rupees per annum.

Land Tenures, and Institutions.

In surveying attentively the ancient Political Institutions of Orissa as connected with the tenure of land, it is impossible not to be struck with the marked resemblance which many of their features exhibit to the system of European policy called the feudal, at certain stages of its progress. I am strongly inclined to think that the comparison might be extended to

India generally, and that a careful enquirer would not fail to discern in every quarter of the country, obvious traces of the former existence of such a system, however irregularly defined, and liable to variation in the details, from local peculiarities. The subject has not hitherto met with that attention which its importance, more especially when viewed in connection with the much disputed question of Zemindari rights, unquestionably merits. Some writers indeed have treated with utter contempt and derision, the notion of the existence of any analogy whatever between the ancient institutions of India, and the feudal system of Europe. Others, however, of equal or greater authority, have not been able to resist the striking evidence of such affinity which presents itself in every province of India, where the Hindu form of government has been little impaired or modified. Thus, Sir J. Malcolm, page 375 of his valuable report on Malwa, observes, " The principle of this part of a Raj or *Rajput* principality, differs little from that feudal system which formerly existed in Europe, and is liable to the same vicissitudes in the relations and powers of the respective parties." But every one knows that the Rajput, is only one branch or epithet of the great Regal and Military caste amongst the Hindus, called the Cshetriya (Khetri), and anciently *all* principalities and kingdoms might in one sense be designated *Rajput*. Captain MacMurdo in an excellent paper on the province of Cutch, in vol. ii. Bombay Transactions, states, " The government of Cutch is that of a pure aristocracy, in which the power is vested in a variety of chiefs on their respective territories, which bear a strong resemblance to the feudal baronies. These chiefs have a head who is entitled Rao, to whom they owe the duty of military service with their relations and followers when called upon." The chiefs in question are afterwards described to be Rajputs. Colonel Wilford expressly applies the title of *Barons*, to the inferior Khetris, in his historical Essays on ancient India. In the essay on Anugangam we find the following curious and apposite passage, " Like Parasurama he (Maha Bali) either destroyed or drove out of his dominions the remnant of the Cshetris or Military tribe, and placed Sudras in their room. These were the *Barons*

of the land who often proved troublesome. Raja Balwant Singh, the predecessor of Cheyt Singh did the same in the district of Benares with the *Zemindars*, who represented the *Cshetris*, and even pretended to be really so; from an idea that it was impossible to improve the revenues arising from the land tax under their management."

In this paper my remarks and illustrations regarding the former and actual state of the land tenure, will of course be confined, as far as the nature of the discussion admits, to the particular province of which I am treating.

I shall have occasion to notice again hereafter, an opinion firmly entertained by the better informed natives of Cuttack, of the ancient existence of a mighty empire, which comprised within its limits nearly the whole of India, and was ruled by a sovereign residing at Hastinapura and Delhi. A general division is believed to have obtained of the lands of the country, into the domains of the supreme Raja (now called the Khaliseh), and the jurisdictions, or fiefs, of a vast number of great Military Chiefs and feudatory Rajas, of the Khetri caste, who were dependent on and owed service to the Lord Paramount, but whose degree of subordination of course underwent constant vicissitudes, according to the circumstances of the times, and the personal character of the ruling Emperor. The most powerful Lords of this empire were the great officers of state called the Gajapati, Aswapati, Chatrapati, and Narapati, who originally held their vast possessions as dependent fiefs subject to the condition of Military service, but afterwards emancipated themselves from all control, and became independent monarchs ruling over numerous inferior Khetris.

Supposing the above view of the ancient political condition of the country at large, to be chimerical and unsupported by sufficient evidence, which however I do not admit to be the case, I proceed to state what may be safely inferred or positively affirmed of the native institutions of Orissa, under the government of its indigenous princes, from a considera-

tion of the vestiges of the old system yet actually in existence. I shall afterwards notice the changes impressed on the face of things, by the two great revolutions which the province has experienced in modern times; first, its subjection to the Mussulman, and afterwards to the British rule.

In the preceding part of my paper, I have noticed generally the great territorial divisions both natural and political which exist in this province. The extensive hilly regions and forest tracts, jungle Pergunnahs and Mehals, as they are now termed, reaching nearly from Bishenpur to the Godaveri, together with the woodland country on the sea shore of Orissa Proper, have been in all ages parcelled out among and occupied by a number of Chieftains of the Military class. These Chiefs may be safely considered as de facto proprietors of their possessions under the native governments, that is to say they held them hereditarily, exercised uncontrolled territorial jurisdiction within their limits, and appropriated the entire revenues, subject to the condition of performing Military service, or other offices and duties, at the court of their superior Raja, the Gajapati, residing mostly at Cuttack, which services have in latter ages been generally commuted for a light tribute or money payment. The more fertile and productive division of the province (now the Mogulbandi) formed the Kot, Khaliseh, or domain of the prince, from which the Hindu sovereigns of Orissa like their successors the Moguls, Marhattas, and English, derived their principal revenues. There can be no question, I think, but that this other great territorial division was the landed estate or property of the sovereign. I may observe, en passant, that such a state of things as above indicated, conforms exactly with the declaration contained in a well known passage of the digest of Hindu law translated by Mr. Colebrooke: "By conquest the earth became the property of Parasuráma: by gift the property of the sage Casyapa and committed by him to *Cshatriyas* for the sake of protection, became their protective property, successively held by powerful conquerors and not by subjects cultivating the soil." So strikingly and universally true indeed is the maxim of the property of the soil vesting in the Cshatriyas, that we find them always either asserting a title to owner-

ship in the land, which they occupy hereditarily, or in the actual enjoyment of the proprietary right, even when reduced to the situation of "*cultivating subjects*"—witness the various castes and classes of Rajput village Zemindars in every quarter of Hindustan, and the western provinces.

The feudal lords of Orissa, for such certainly may the Military Chiefs whom I have above referred to, be termed, are known and described by several different titles both in history, in official records and in the common language of the country, and these are quite indiscriminately applied, whence has resulted a corresponding confusion of ideas. They are called simply Khetris (Cshetriyas,) from their caste; Khandaits, an Orissa name for a branch (I believe a less pure one) of the same class, signifying literally persons entitled to wear the *Khanda* or national sword of Orissa; Bhúnia, Bhúyan or Bhúmi derived from *Bhu*,* the earth, and synonimous with Bhupati (Lord of the soil): Poligar, a Telinga word, derived from *Pollam*, a fief: Sawant, in Persian, Sirdar, meaning Chief and Lord; Sevakan Arní Dar, or servants and vassals holding tracks of country hereditarily, on the condition of service; and finally *Zemindars*. Many of them were descended from the supreme Rajas of the country. We have Orme's authority in a remarkable passage of the 8th book of his history for the belief entertained by the Poligars south of the Chilka lake of their origin as above intimated. He says, "These conquests (made by a Raja of Orissa, some "centuries before Mahommedanism) were distributed in many portions to his "relations, officers and menial servants from whom several of the present "northern Poligars pretend to be lineally descended, and to govern at this "very time the very districts which were then given to their ancestors." It is not improbable that many of the Orissan Khandaits and Bhúnias first received estates during the 12th century of the Christian æra, in Raja Anang

* Mr. Elliot, in his observations on the inhabitants of the Garrow hills transmitted to the Asiatic Society, observes, "The head people of the villages are called *Booniahs*, a name used by the *head Rajas* of *Bengal* when the king resided at Gour." In the Ayin Acberi, the word Boomi, derived from *Boom*, the soil, is continually used as synonimous with Zemindar.

Bhim Deo's time, who is said to have created sixteen Sawants or great Lords, but the tenure of the majority no doubt reaches back to a very remote antiquity. To describe a little more particularly their duties and offices, I may observe, that they were posted all round and along the frontiers of the Raj, with the view to defend it from the irruptions of neighbouring powers, or the incursions and devastations of the savage inhabitants of the wild regions in the interior, such as the Kands and Coles, who to this day give serious annoyance in many parts of the hill estates, and if the belief of their origin and ancient situation be well founded, were doubtless in former ages far more numerous and formidable than at present. In this point of view their situations and duties resembled much that of the Lords of the Marches in Europe. Nor is the above the only striking feature of analogy between the feudal lords of India and the western hemisphere. The estates or jurisdictions of that class in Orissa were always called by the Hindus, Gerhs, and by the Mussulmans, killahs or *Castles*. A certain part of the lands under the head Officer were parcelled out amongst several military retainers and dependents called Naiks, Dalais, Dalbehras and sometimes Khandaits, who held of their superior on much the same principle, as he did of the supreme Raja, though generally speaking by a more limitted and imperfect tenure. Under these again, a portion of the lands of each subordinate Gerh, were assigned as service land to the feudal Militia of the country, called Paiks, who following equally the occupations of soldier and cultivator, were obliged at any moment when called on by their leader, to take up arms, and accompany him to the field. In time of war the Khandaits or nobility of Orissa at the head of their respective contingents of this landed militia, ranged themselves under the standard of their sovereign, and formed the main part of his Military array. Thus we frequently read of the Gajapati assembling his chiefs to attend on a warlike expedition, and we find that the Sunnuds, granted by the Mogul government (in cases where they exercised the right of investiture), always contained a condition that the Khandait should be ready to attend with his *contingent*, when summoned by the Military Officer of his division. The Paiks are of course the local Infantry constantly referred to in the Ayin Acberi. The author

observes speaking of the imperial army ; " The Zemindari troops alone are in number upwards of four million and four hundred thousand, as will hereafter be particularized"—a fact which shews the extensive prevalence of the Military tenure throughout the country even as late as the 16th century. The proportion of landed militia set down for Orissa Proper in the same work, is about one hundred thousand. Besides the general obligation of Military service, the Indian feudatories were bound to do homage, and to perform certain nominal duties or offices resulting from their tenures, when in actual attendance on their liege lords, called by the expressive word *Sewa, Seva,* or service (in Persian Khidmat), a consideration of which, to compare small things with great, reminds one strongly of some of the ancient forms of the Germanic constitution. Thus it was the business of one to bear the sword of state; another held the shield; a third carried the umbrella or royal standard ; a fourth presented the Raja's slippers ; a fifth fanned him with the regal chouri, &c. The above services are to this day performed in the presence of the Khúrda Rajas, by several of the hill Zemindars, as often as they visit Púrí, though the distinctive character of the office appropriated to each, has become a good deal merged in the simple duty of holding the chouri and pankha, in the presence of the representative of their ancient Lords Paramount.

The same duties were performed at the Court of Vijayanagar, ruled by the Princes of the Narapati race under the title of Sovereign Lords of the Deccan, by the Chiefs and Rajas who held of them. Colonel Mackenzie's paper on the history of those kings, published in one of the volumes of the Annual Register, has the following passage : " In this King's reign several considerable Rajas used to attend him in the duties of the following offices, viz. the King of Camboja Desam presented him with the Calinji ; the Panda Raja held his bag of beetle-nut; the King of Ginjee carried his chouri ; the Raja of Kerala district carried his water goglet; the Raja of Anga Desam presented him beetle as his servant. The Raja of Mucha country's office was to dress him; the Raja of Gool carried the umbrella; all the other offices were executed in like manner by persons of rank. All

those on their first visit performed their respective duties to Ramaraja, when he was seated on his throne or Sinhásanam. To this day likewise, the feudatories or thakurs of the great Rajput principalities, as Jyepur, Joudpur, and Oudipur, are bound to attend the court of their prince for certain fixed periods in each year, there to do homage, and to perform such services as the terms of their several tenures prescribe.

The estate of the Chief Khetri, or Lord Paramount, comprized the fairest and most fertile portion of the monarchy of Orissa. In every part of India it would seem that, even under the Hindus, the domains reserved for the crown constituted, if not the largest, at least the most valuable and productive share of the whole territory, and it was the uniform policy of the strong government of the Mohammedans, constantly to enlarge this share by the gradual subjugation and absorption of the possessions of the lesser chiefs and princes. As it is the above-mentioned estate or concern, with the management of which the Officers of the British government are chiefly occupied, and from which nearly all its revenues are derived, it is of course of particular importance to enquire respecting the system and the rights anciently prevailing and still existing, in the tract known by the modern appellation of the Mogulbandi or Khaliseh. Whilst the Mogulbandi yields to the state a revenue of between twelve and thirteen lacs, in its real character of Proprietor, the Rajwara or division occupied by the feudal chiefs, pays a light tribute of only 1,20,000, the difference between that and the actual net produce, which is at the lowest calculation in the ratio of one to ten, being enjoyed by the several Zemindars, in virtue of *their* proprietary rights.

In the Khaliseh territory, obvious traces exist to this day of a subdivision of lands into tracts held by Military retainers, and those of the common Malguzari ryots. Tenants of the former description are called at present Paiks, and lesser Khandaits, and the estates on which they are found are entered in the revenue accounts as "*Khurdiah Gerjat*,"* but whatever

* Lit. small forts or fortified posts, with lands annexed.

may have been their number anciently, they are now too few and unimportant to claim a particular notice. The ryoti land, paying a full rent to the sovereign, demands our principal attention. According to the uniform system of India generally, it was partitioned into numerous *grams*, townships, or village societies. The larger revenue allotments or circles of villages known to the Hindus of Orissa, were denominated *Khand* and *Bisi* or *Bishe ;* words meaning literally a portion or district. Each of these petty districts was under the management and controul of two descriptions of hereditary officers, vested with police and revenue functions, viz. the Khand Adipati and Bishuya or Bissoee, (words signifying chief of a division,) who was the principal man; and the Bhoï Múl of the Karan or writer cast, who had the more particular charge of keeping all the accounts and registers connected with the land. In parts of the Deccan, the same description of officers still exist, and are called the Des Mukh and Des Pandiah, terms of precisely corresponding import. They seem to have acted jointly in the discharge of some of their functions, and separately and independently in regard to others. One perhaps had the more especial duty of administering the police, the other of collecting the revenue; whilst they both watched generally over the fiscal interests of the state, and acted as umpires and moderators of Punchaits, in investigating and adjusting disputes between inhabitants of different villages, or between the people of a village and their head man. Every respectable village had its chief and accountant, called the Padhan and Bhoï—but frequently several of the smaller hamlets of Orissa were associated together under one set of officers of this name; much oftener the same individual performed both functions in a village; and sometimes none of the kind existed, in which case the charge of the village affairs attached more immediately to the division officer. Where the Padhan and Bhoï both existed, they discharged respectively much the same duty in regard to their individual village or villages, as the superior officers exercised in regard to their circle of villages. The Padhan looked after the police with the aid of the village watchman, who made his reports to a Sirdar or Sirdars called the *Or* Khan-

dait* stationed with the Bisoï; the Bhoï kept the village accounts and furnished information to the Bhoï Múl or chief accountant. All these functionaries held their situations hereditarily, and were in the habits of mortgaging or even selling the whole or shares of them, with the sanction of the ruling power, just as we see the priests and officers in the temple of Jugunnáth at this day disposing constantly of their several *shewas* or services, with the emoluments thereunto annexed. To infer from these circumstances any right of property *in the soil*, would seem equally rash and absurd. It is a nicer question whether under the old Hindu system the actual occupants of the soil, that is the ryots, were considered to possess any subordinate title of ownership in land. There are no obvious traces of such a right now remaining in Cuttack, as we read of in Canara and Malabar. I have never yet been able to discover any well authenticated instance of the *sale* or *mortgage* of land by a Malguzari ryot of the province. The thaní or fixed cultivators, however undoubtedly possessed under the old Rajas the privilege of hereditary occupancy; their fixed assessment was light and easy; and there was then no one to dispute the matter with them, excepting the despotic uncontroled sovereign of the country, who, whatever his claims in theory, of course required nothing from the land but an adequate revenue.

The changes consequent on the subjection of the province to the Mogul government come next to be considered. It is well known that after the defeat of the Afghan usurpers who had gained temporary possession of Orissa, by the armies of Acber under the command of his General Khan Jehan and others, the celebrated Dewan Túral Mall visited the province A. D. 1580 to superintend the introduction of his settlement of the crown lands, founded on a measurement and valuation called the Taksím Jamma and Tankha Raqmi. The arrangements for the annexation of the Suba of Orissa to the empire, did not, however, receive their final completion until the arrival of Raja Man Sinh the Imperiál Lieutenant, who assumed charge of the government in 999 Amli.

* That is, the Khandait of the *cultivating* as contradistinguished from the Military caste.

Under his administration the heads of the existing branches of the Royal family were acknowledged as Rajas; they were invested with the rank and titles conferred by the Mogul Court on officers of distinction; and extensive portions of country were assigned to them as hereditary fiefs in Zemindari tenure. No regular tribute appears to have been required from them on account of their own lands, but the right of investiture was reserved to the ruling power, with the privilege of levying such contributions on the accession of a new Raja, as it might be thought expedient, according to the circumstances of the times, to demand. The reigning prince was styled the Raja of Khúrda with the rank of a Commander of 3,500 "*Mansabi Seh Hazár Panjsad*," and his estate was composed of the jurisdiction called Killah Khúrda, with the Mehals Rahang, Limbai Pursottem Chetter, &c. alienated from the Khaliseh. To the two sons of Telinga Mukund Deo (the last independent monarch), were assigned respectively with the title of Raja and rank of five hundred, Sarangher, Pattia, Sailo, Saibír, &c. and Ál with Derabissi, and Uthár. A certain number likewise of the great chiefs of Orissa (Zemindars and Sirdars, as they are called in the revenue accounts,) were placed under the orders and controul of each of the above Rajas, who collected the tribute before due from them, or then for the first time imposed. *Zemindar*,* I may here observe, is the obvious translation of the word Bhúnia, Bhyan, or Bhupati, the common title of the ancient feudatories of this province, whose offices now received a Persian name, as well as their jurisdictions, the Hindi word Gerh, being exchanged for *Killah*. The more distant Zemindars were separated from the control of the superior Raja, and placed under seven principal Zemindars or Sáwants (not distinguished however by the title of Raja,) viz. the Zemindars of Keonjhar, Moherbenj, Bishenpur, Futtihabad, Naraingerh, Karrangher, and

* Even the powerful Rajas of Joudpur, Bhartpur, &c. were called Zemindars by the Mogul government down to the latest period, and we know from history the nature of their tenures. They were bound to attend in succession on the person of the Emperor at the head of a fixed quota of Troops. Their own countries were and are still subdivided into the lands of the Military retainers or Thakurs, and the revenue lands, on the same principle that prevailed under the Hindu government in the empire at large.

Nag or Bagbhúm. The jurisdiction thus left to the Raja of Khúrda, extended from the Mahanadi to the borders of Kimedy in Ganjam, comprizing 129 Killahs, Gerhs, or hill estates, exclusive of those situated within his own Zemindari. The above number tallies exactly with that given in the Ayin Acberi, the author of which observes, "In Cuttack are one hundred and twenty-nine brick forts (killahs,) subject to the command of Gajapati." The other two Rajas had under them altogether fifty-two Zemindaris and seventy-nine killah divisions ; and the seven Zemindars mentioned fifty-six ditto, containing one hundred and one killahs—all exclusive of their own estates, and the dependent killahs situated within them. The detail of the arrangements adopted by Raja Man Sinh for the disposal and management of the above important class of estates, cannot be very interesting to the general reader, but I shall nevertheless introduce an extract from some old revenue accounts in my possession, which describe those arrangements, as the documents in question are certainly highly curious, and they are not devoid of utility to those who have any concern in the administration of Cuttack, and the two adjoining districts of Ganjam and Midnapore. I have added to the translation from the Persian statement, a column shewing the present state and circumstances of the killahs which remain under Cuttack.

EXTRACT.

Statement of Killajat, in the jungles and hills under Zemindars, subject to tribute (Peshkash) according to the allotment of Raja Man Sinh in 999 Amli.

Under the Raja of Khúrda whose Manseb is that of 3500 are placed exclusive of Mehals, thirty-one Zemindars, and two hundred killahs.

The Raja's own estate of Khúrda, one Zemindari, contains seventy-one killahs, viz. Khúrda, Rathipur, Ber Gerh, Sissupal, Jharpareh, Kuplipersad, Paterpareh, Nonepur, Jamkhely, Tapang, Chatarma, Lal Sinh, Gangpareh, Malipareh, Dúmdúma, Palih, Ramesar, Manibandh, Mankgora, Mangoi,

Kormati, Kalamatiah, Kondlogerh, Mangalajúri, Jarípareh, Rorang, Karm, Mallipareh, Narsingpersad, Baran Gerh, Karang, Mirtúnjay Gerh, Kaimattia, Usna, Baranda, Balbhadderpersad, Nowailee, Banjgiri, Tarkai, Seraen Gerh, Matiapareh, Bangro, Bhingro, Koklo, Karki, and eight killahs, in Limbai; Andharúa, Darútang, Kolapokhar, Tirah Sowri thirteen killahs, Nakhikot, Kaipadda, Bolgerh, Gúmhapur, and Múljher.

Under the Raja's command are thirty Zemindaris of Hindu Sirdars, containing one hundred and twenty-nine killahs.

	Zemindari.	*Do. Killahs.*	*REMARKS.*
Bankee, - - contains			Now an independent tributary Mehal.
Dumpareh, - - -			Tributary subject to regulations.
Attari, - - - -			Under Khurda.
Kalúpareh, - - -			Annexed to Limbai. Both of the above are still remembered as Khandaits which were wrested from the old feudal Chiefs by the Khurda Rajas.
Barrambah, - - -			Tributary Mehals exempt from regulations.
Tigria, - - - -			
Narsinhpur, - - -			
Anghole, - - - -			
Talchere, - - -			
Murdeswara, - - -			Annexed to Khurda.
At'hgerh, - - -			Tributary.
Denkhanal, - - -			
Sirhinda, - - -			
Audhiyarí, - - -			This and the two following belong now to the Jagir of Kerar Mohamed.
Bajarcote, - - -			
Achalkote, - - -			
Nyagurh, - - -			Tributary.
Khandiapareh, - - -			
Ranpur, - - -			
Daspalla, - - -			
Banpur, contg. Súran, Roheri, Bakahir, Banpur, Parrikhud, Chattergerh,			Now annexed to Khurda and the Jagir of Malúd and Manikpatam.
Ghoomser, - - -			This, and the seven following Hill Estates, are now under the Ganjam District. They were separated from Orissa about 1730 A. D. They pay to the British Government of Madras a fixed revenue of nearly three Lacs of Rupees including the Estates into which they have been latterly subdivided.
Kalicote, - - -			
Kúrlo Atgerh or Hatgerh, -			
Chagatti, - - -			
Moheri, - - -			
Shirgerh, - - -			
Palur, - - -			
Tikally Raghunathpur, -			

Under the Raja of Sarangerh, whose Manseb is that of five hundred (exclusive of Mehals,) are placed thirty-one Zemindaris containing fifty killahs.

The Raja's own estate with Balanta, two Zemindaris contains twelve killahs, viz. Killah Sarangerh, Bajgiri, Talgiri, Gowaligerh, Raghunathpur, Pattiah, Kalabank, Atagerh, Motri, Garukun, Balanta, and Nurkantiah.

Dependent Hindu Sirdars, holding twenty-nine Zemindaris and thirty-eight forts under the Raja's orders.

		Zemindari.	*Killahs.*	*REMARKS.*
Arang Majrai,	contains	1	1	The whole of these Killahs have been assessed under the British Government at the full Jumma. They lie within and on the borders of the Mogulbandi South of the Mahanadi in all directions, chiefly on the East and South and all retain the appellation of Killah in the Revenue accounts of the district. The Raja of Sarengher was deprived of all controul over the Sirdars or Khandaits long before the Mahratta accession.
Golrah,		1	1	
Ropasu,		1	1	
Pyan and Nír,		1	2	
Amnakúd,		1	2	
Telpadda,		1	2	
Alandapareh,		1	2	
Bealís Batee,		1	2	
Tabha Golra,		1	2	
Niti,		1	2	
Nyagerh,		1	2	
Ursan,		1	2	
Tarkye,		1	2	
Arkiyai,		1	8	
Bhowara,		1	2	
Amlihatta,		1	1	
Bedpur,		1		
Durgeswar,		1	1	
Amripershad,		1	1	
Intalogerh,		1	1	
Chandpur,		1	1	
Garggesswur, &c.		1	4	In Pergunnah Sailo.
Bir Rampur,		1		In Choordes.
Bahrampur,		1		
Sitha		1		
Jonye,		1		
Kishenpersad,		1	1	
Turang, &c.		1	3	In Pergunnah Saibeer.
Garupareh,		1	1	In Pergunnah Gunnito.

Under the Raja of Ál with the rank of five hundred are placed twenty-four Zemindaris, containing forty-two killahs.

The Raja's own estate of killah Ál, one Zemindari and one killah.

Dependent Hindu Sirdars, twenty-three Zemindaris, containing forty-one killahs.

	Zemindari.	*Killahs.*	*REMARKS.*
Kanka,	1	2	The first nine of these are now Tributary Estates occupying the Eastern Division of the Rajwara. The tenth lies on the western side under the hill and is held at a Tribute but subject to the regulations of the British Government like the preceding. Few of the others have retained even the appellation of killah to the present day and the control of the Raja of Al over them has long ceased.
Rynta,	1	8	
Kojang		2	
Kokilo Dip,		2	
Harrispur,		2	
Marrichpur,		2	
Bishenpur,		2	
Jamkurrera,		2	
Chedra,		1	
Darpan,		2	
Dholtang,		1	
Daljora,		2	
Chatter,		2	
Amjher,		1	
Balbupur,		2	
Alemgir,		1	
Nattiggree,		1	In Pergunnah Bargoan.
Kalupareh,		1	
Bhúnia Badrak,			
Nounidh,			
Barmatree,			
Alúpedda,			
Kaijang,			

Under the Zemindar of Keonjhar are fifteen Zemindaris and fifty-five killahs.

His own Estate one Zemindari, containing eleven killahs, viz. Anandpur, Sikrí, &c. four killahs, Mítagher, and others name unknown.

Dependent Chiefs fourteen Zemindaris, having twenty-four killahs.

	Zemindari.	*Killahs.*	*REMARKS.*
Denkhanal,		2	The first of these is now one of the principal of the Independent Tributary Mehals. The 2nd Tributary but subject to the Regulations. Few of the others retain the name of Killah and none the privilege of paying at a fixed assessment. The Zemindar's authority is now confined to Keonjher.
Súganda,		4	
Kantajher,			
Dholgerh,		2	
Ragree,		2	
Pachimkot,		2	
Amalek,		2	
Baghpareh,			
Balrampur,			
Chochanda,			
Kaptigerh,			
Ambohatta, Pynsan & Oral,			

Under the Zemindar of Moherbenj twelve Zemindaris containing forty-two killahs.

His own Estate, one Zemindari containing eighteen killahs, viz. Bhunj Bhúm, Mantri, Hariharpur, Dewalia, Púrnia, Karkachna, Bamanhattí, Sirhonda, and small insignificant forts, ten.

Dependent Chiefs, eleven Zemindaris having twenty-four killahs, viz.

	Zemindari.	*Killahs.*	*REMARKS.*
Nilgiri,	1	10	One of the Cuttack Tributary Mehals.
Sinhbhúm,	1	1	Now an Independent Estate.
Barr bhúm,	1	1	
Patharhai,		1	
Narsinhpur,	1	4	One of the Jungle Estates in the Midnapore district.
Deba,			
Tyarchand,			
Jamcunda,			In Cuttack at the mouth of the Subanrekha.
Chargerh,		2	Ditto.
Talmunda,			One of the Cuttack killahs.
Jamrapal,			Ditto.

Under the Zemindar of Bishenpur, are twelve Zemindaris and twenty-nine killahs.

His own Estate one Zemindari comprising fifteen killahs.

Dependent Chiefs, eleven Zemindars, having fourteen killahs.

	Zemindari.	*Killahs.*	*REMARKS.*
Mysadal,		1	Most of these are included in the Zillah of Midnapore. Manbhúm belongs with Bishenpur itself, to the Jungle Mehal Zillah.
Kúmgerh or Gúmgerh,		1	
Tamlook,		1	
Hattragerh,		1	
Kolegerh,		1	
Manbhúm,		1	
Sinhbhúm,		2	
Bamanbhúm,		2	
Nalbhúm or Balbún,		1	Mr. Grant mentions that Bograi with Raipore in Orissa formed anciently part of the Zemindari Raj of Bishenpur. They were annexed to the Burdwan Chakleh in 1135 A.
Bagbhúm or Nagbhúm,		1	
Raipur,		1	

Under the Zemindar of Futtihabad seven Zemindars containing seventeen killahs.

His own Zemindari, Futtihabad, &c. containing two killahs.

Dependent Zemindaris six, containing fifteen killahs.

	Zemindari.	*Killahs.*	*REMARKS.*
Bahuria, - - -	1	1	Belong chiefly to Midnapore.
Ghatsila, - - -	1	2	Ghatsila is now, I believe, the residence of the Narsinh Gerh Zemindar.
Mynachúra, - - -	1	8	Mynachúra and Narajoul lie on the Eastern side of the Midnapore district, the irregular straggling Jurisdiction both of the Cuttack and Midnapore Chiefs arose of course unavoidably from the scattered position of the Gerhs placed under them.
Narajoul or Tarajol, - -	1	1	
Kolpada, - - -	1	1	
Nyagaon khalar, - -	1	2	

Under the Zemindar of Naraingerh, six Zemindaris, containing 17 killahs.

His own Zemindari contains four killahs.

Dependent Zemindaris five, containing thirteen forts.

	Zemindari.	*Killahs.*	*REMARKS.*
Dharinda, &c. - - -	1	4	
Behadurpur, - - -	1	2	
Uttarbehar, - - -	1	2	
Pertab Bhan, - - -	1	4	
Harisanker, - - -	1	1	

Under charge (of Zimmeh) the Zemindar of Karan Gerh six Zemindaris, having eight killahs.

His own one Zemindari, containing two killahs.

Dependent (Tabidaran) five, containing six killahs.

	Zemindari.	*Killahs.*	*REMARKS.*
Chatna, - - -	1	1	
Dhowarpareh, - - -	1	1	
Gerh Dowali - - -	1	1	
Kyarchand, - - -	1		
Chourassi, &c. - - -	1	2	

Under the Zemindar of Nag or Bagbhúm.

His own Zemindari one, containing two killahs.

	Zemindari.	*Killahs.*	*REMARKS.*
Rajgerh, - - - -	1	1	
Shujaabad, - - - -	1	1	
Ghumera, - - - -	1	2	
Dhowalgerh, - - - -	1	1	

Badshahi Thanehs under Cuttack, - - - - - - - - - - 21

——————— under Bengal, - - - - - - - - - - 4

Established in old times by Raja Man Sinh 999 Amlee. Cuttack, Pipley Nour, Talmal, Pacherah, Jajipur, Badrak, Soro, Ramna, Bastah, Jellasore, Futtihabad, Narain Gerh, and Midnapore; the four last under Bengal.

Under Kam Garkhan: Malúd, Telingapenth, Santrapur, Chattiah, Sarangerh, and Mahulpur. Under Hasim Beg Khan: Naltigri, Alemghir Shirgerh.

Under Shujaa-ud-din, Fatteh Gerh, Shujaa Gerh, Paikani, Ahmedpur, Andiyari, Tiran, Gope, Kujang, and Rynto, both of which latter ones were broken up by the Zemindars. Mohammed Taki Khan after the seizure of Raja Ramchander Deo planted twenty-two thanehs for the protection and subjugation of Rajwara from Bulwanta to Banpur, but they were all removed excepting Balanta when Bir Kishore Deo succeeded to the Raj by order of the King.

Whilst the ministers of Akber thus wisely left the turbulent feudal chiefs or Khetri Zemindars to the management of those who from their local rank and hereditary influence were best qualified to control them, they considered it expedient to adopt also with very little variation the system which they found existing for the administration of the affairs of the *Kot*, or as they called them the *Khaliseh* lands, that is the country annexed to the Imperial Dewanni. The only marked change which they introduced, indeed,

was that of translating all the uncouth and harsh sounding Úria designations of things and offices, into more familiar Persian terms of corresponding import.

The *Khands* and *Bissees* now became *Pergunnahs;* the Police and Revenue Officers, Chowdris* and Vilaity (Mofussil or Provincial) Canungos, or generally Talúkdars, the heads of villages Mokaddams; and the villages themselves Mouzas. The larger territorial division of Sircar was perhaps arbitrary, suggested by considerations of financial convenience, or may have been copied from the Úria *Dandpat.* The term Mehal, or plural Mehalat, by which the Revenue lands were designated in contradistinction to Killajat or the Military ditto, comprized in Akber's time, each, several Pergunnahs, and answered nearly to the modern Chakleh, though it is now applied to every petty estate or interest separately engaged for with the Collector.

The Revenue Officers of the khaliseh lands, called Chowdris and Vilaity Canungos, or generally Talúkdars, certainly acquired no new rights under the Mogul Government. We find them on all occasions acting with the Mokaddams as the fixed hereditary local Officers of the state, discharging some of their functions in relation to their Pergunnahs jointly, others separately and independently,—exercising in short the same privileges, and enjoying the same percentage and profits, under the new as under the old system of things. Amongst the chief of their duties were the collection of the Government Revenue assessed on their several divisions, the Control of Police, the adjustment of disputes relating to the Pergunnah generally, and the enforcement of all the government orders and instructions relative to the assignment and appropriation of lands. Their acknowledged profits were five per cent. on the collections, certain

* The author of the Ayin Acberi says, speaking of the Súbeh of Bera,—"In this country they call the *Chowdri,* Desmookhee: the *Canungoe,* Despondiah; the *Mokaddam, Putayl* and the *Putwaree, Koolkurnee.*"

perquisites on fishery, orchards, produce of the jungles, &c. (the Phalkar, Jalkar and Bankar;) taxes on Trade (Muteharfa;) the privilege of granting leases to new settlers in villages where there were no Mokaddams; and the less distinctly avowed, though not less profitable, perquisite of granting free of rent and selling, small portions of the lands called "Banjar Kharej Jamma," or waste unoccupied and unassessed land, which had either never been subject to rent, or had been deserted for years. The Mokaddams under them exercised privileges of a nearly corresponding nature and degree. They were often separated with their villages entirely from the control of the Talúkdars, when their oppression had become intolerable, or they could purchase the favour of the ruling power. We find these persons constantly addressed jointly with the ryots and cultivators, in all the perwannehs and firmans both of the local and Supreme Governments, according to the well-known form, "Let the Chowdris and Canungos, the Mokaddams, the ryots and cultivators of Pergunnah, so and so, sircar, so and so, know." If other evidence were wanting, the names and designations of their offices would clearly explain the light in which they were viewed by the Moguls. Chowdri or Mokaddam signify simply chief or head —Vilaity Canungo, the local or provincial Officer of account. The Chowdri Talúkdar has been always treated under the British Government as a proprietor of land, and the ambiguity of the designation of *Chief*, prevents the error of such a view of his condition being apparent at first sight. The Canungo Talúkdar has never been taken notice of in discussions regarding the land tenures of India. His denomination is so clearly indicative of a merely official tenure and occupation, that the most determined advocate of Zemindari rights would hardly perhaps maintain *his* claim to be called a Proprietor of the soil, though undoubtedly the title of both descriptions of Talúkdars stands on precisely the same footing. To control and superintend these local Officers of the old regime, and to maintain the principles of the new settlement inviolate, the offices of Sadder Canungo and Sadder Chowdri were instituted by Akber, or rather his Dewan Tooral Mall. The Sadder Chowdris, Canungos, and their establishments, should be carefully

distinguished from the Vilaity or local and country Chowdris and Canungos, the Officers of the former Hindu Government. Whilst the latter were all Úrias, the newly created Offices were invariably filled by natives of Bengal. This circumstance of country and descent, has latterly been almost the only distinction between the two, as the four Sadder Canungos of Cuttack and many of their Gomashtehs contrived in process of time to obtain the management of a great number of Talúks, and became Talúkdars, when their utility as checks and controllers must of course in a great measure have ceased. The situation of Sadder Chowdri has long ago altogether disappeared.

Down to the conquest of the Province by the British arms, the functions and situation of the Chowdri and Canungo Talúkdars and the Mokaddams, remained precisely as I have above generally explained them. All Pergunnahs in the Marhatta accounts (with very few exceptions) are found entered as divided into the Talúks of Chowdris and Canungos named after the holder, Talúka Chowdri, Talúka Sudder Canungo, Talúka Canungo Vilaity, &c. and the separated or Mazkúrí villages of such Mokaddams as had been entirely emancipated from their control, with certain alienated lands known by names and revenue terms which it is unnecessary here to mention. But on the introduction of the British Government and regulations, all parties whose names appeared in the public accounts of the preceding administration as answerable for or intrusted with the collection of the public dues, were forthwith acknowledged not only as *Zemindars*, but as proprietors of the land comprized in their Zemindaris. Whatever may be thought of the policy of this admission and the advantages that have resulted from it, that it was founded on an erroneous view of the state of things under the native Government, seems to me to be beyond all question. How did this error, which seems to have been as generally prevalent every where else as in Cuttack, originate? I think its origin and prevalence may be ascribed chiefly to three causes; 1st. the want of a proper distinction being made between the rights and circumstances of the real ancient Zemindars

of the country, and those officers called by the Moguls Talúkdars or by whatever other name, who exercised hereditarily the management and collection of the domains of the state; 2nd. the confused and inaccurate application of the term Zemindar by the natives of the country themselves, long before the accession of the British Government, which was probably a principal cause of the want of discrimination above noticed; 3rd. the failure to distinguish between the inheritance and sale of an office (a practice probably peculiar to the Hindus) and the inheritance and sale of the land with which that office was connected and concerned.

On the real and essential difference existing between the two classes in Orissa, *properly* called Zemindar and Talúkdar, I have already said enough. The former were the feudal Chiefs or Barons of the land, holding their estates by a title of property, and accountable to their sovereign only for the performance of such services, military or otherwise, as the condition of their tenure imposed. The latter were the hereditary Officers of Revenue and Police, on the widely extended domains of the superior Raja himself.

With regard to the second source of error which is indeed intimately connected with the first, I would observe that we may trace four different senses in which the term Zemindar has been at different and successive periods used and understood in this country. In the days of Akber and his successors down to some period of Aurangzeb's reign, it was confined strictly to the old feudal Lords and Chiefs such as I have before described, who were the ancient original Bhúyans, Bhúpatis, or Zemindars. 2nd. At different periods of the Mogul and Mahratta government, *Zemindaris* were occasionally created in imitation of the Hindu practice, either by separating off a number of *villages* from adjoining Pergunnahs, or by allotting one or more *Pergunnahs* of the khaliseh land, as fixed assignments, to some distinguished Chief or able Revenue Officer, Musselman or Hindu, to answer a particular purpose. These creations were apparently common in Bengal, and

no doubt have contributed greatly to puzzle and entangle the question of Zemindari rights as relating to that province.* There are about five or six instances of the kind in Cuttack subsequent to Raja Man Sinh's time, of which the Zemindari composed of Pergunnah Kúrdés, Antrudh, and Kaljúrí, created as late as 1780—90, A. D. is the most remarkable case. The new tenure thus created would be naturally of rather a mixed and ambiguous nature. It was obviously by no means the policy or general practice of the Mogul Government to raise up an *hereditary* nobility, though they might occasionally adopt proceedings leading to that result, to answer some special end. If we look to the proper original import of the word *Zemindar*, the tenure in question would have some claims to be considered as involving a right of property in the soil: but if we try the nature of the grant by the contents of the sunnud or deed itself which conferred it, we must unhesitatingly class the Zemindari so created, as nothing higher than a Talúkdari, or a mere official trust, of the description called Ihtimam. Instead of military service which the policy of the Musselman government did not require, the *khidmat* or service enjoined in the Zemindari sunnuds to which I refer, is that of keeping up a good police and paying a certain fixed revenue. The remuneration to be enjoyed in return is always distinctly indicated, viz. the Nancar, Rassúm and Lowazimeh, or percentage and perquisites. The old Talúkdars, where *Pergunnahs* were thus granted, continued sometimes to exist in a dependent capacity; sometimes were altogether ousted or bought out. 3rd. In latter times as the vigour and regularity of the old system became relaxed, the Chowdri and Canungo Talúkdars came to be known as the *Zemindars* of their Pergunnahs generally. Their Talúks were not, to be sure, entered in the public accounts as Zemindaris, nor would any single Talúkdar call himself a Zemindar, but they assumed conjointly the distinction of Pergunnah Zemindars and were so termed often by the ruling power. It is curious and not unimportant to remark that whilst the Talúkdars became thus exalted to

* They may be in general distinguished by their Musselman appellations as Rajshahi, Mahmúd Shahi, Fattihabad, Fattehpur, &c.

the rank of Zemindar, the proper Zemindars mounted a step higher and styled themselves Rajas. Before even the British accession, and certainly ever since that period, every hill and jungle Zemindar of Orissa has been pleased invariably to adopt the style and title of Raja. At the great Man Sinh's settlement we find three Zemindars only acknowledged as such, viz. the three Princes of the Royal family. All the other feudal Chiefs were classed in the rank of Khandaits, Sirdars, and Zemindars. The fourth and last mode of applying the title of Zemindar is as under the British government, when every class and description of persons engaging in chief with the Collector for payment of revenue, obtains, on all occasions, the dignity and benefit resulting from that appellation. We may distinguish no less than seven different grades of persons holding offices and tenures connected with land, who appear in the Collector's accounts as Zemindars, and absolute proprietors of the soil : 1st. The ancient Zemindars (now Rajas) of the killah estates. 2nd. Zemindars of Mogul and Marhatta creation, holding one or more Pergunnahs, as Cúrdes, Útikan, Shahabad, &c. 3rd. The Chowdri and Canungo Talúkdars. 4th. The independent (Mazkúrí) Mokaddams. 5th. Village accountants, called Serberakars, and Kárjís who sometimes managed their villages and paid the rents to the Marhatta government. 6th. The head-men (Pursettís) of patnahs, or villages containing merely houses with little or no arable land attached. 7th. The holders and proprietors of petty alienated portions of land called Kheridah, resumed jagirs, service lands (Mouajib), &c. &c.

It is of some importance to my argument to consider how far the testimony, either direct or incidental, of the best writers of the country, supports the view which I have taken of the original essential difference between the Mogul Zemindars, and the great Revenue Officers called Chowdris and Canungos, or more generally Talúkdars ; and of the confusion created in latter times, by the inaccurate and indiscriminate application of the former term.

On the only occasions when the author of the Ayin Acberi mentions Zemindars, the word is used entirely in the sense I contend for, that is, as designating the class of Military Chiefs and feudatories, bound by their tenure to furnish troops, &c. for the service of the state. He mentions several Rajput Zemindars (sometimes expressly under that denomination, sometimes as Bhúmis) commanding bodies of Troops in Berar, in the account of which Súbeh also, he observes, that the Chowdri is here called Desmukh, Canungo, Despandia, &c. but does not explain the nature of the duties of those officers. In treating of the Súbeh of Bengal likewise, he states, after recounting the amount of the revenue, " And the Zemindars (who are mostly Koits)* furnish also 23,330 cavalry, 8,01,158 infantry, 170 elephants, 4260 cannon, and 4400 boats." In a passage which occurs in part 3rd, describing the duties of the Foujdar, the word *Zemindar* has been erroneously used by the translator Mr. Gladwin. The original runs thus, " When a Buzerger, (husbandman or ryot,) or an Amil Guzár of the Khaliseh, or a Jagirdar, may prove refractory, he shall endeavour first to bring him back to his duty by fair words ;" which the translator renders, " Whenever a *Zemindar* or a Collector of the Royal or Jagir land."

If the Royal domains, or Khaliseh lands, were really held, under the Mogul government, by a number of large *proprietors*, whether called Zemindar, or by whatever other name, it seems scarcely conceivable, that all mention of, and allusion to, such a class, should have been omitted in the chapter of the Ayin Acberi, (viz. part 3,) which treats expressly of the famous ten year's settlement of the imperial lands, and the arrangements and system of management therewith connected. No one can peruse that chapter without

*The remark that the Bengal Zemindars are mostly Koits or Cayasthas, who are of the Sankar varan, or mixed impure breed, inferior even to Sudras, may seem partly at variance with what I have advanced, but it should be recollected, that, as I have already stated, the genuine Cshatriyas are considered to be extinct, in many parts of the country, and that those who now represent and stand in the place of the regal and military class, are often of very inferior extraction. It will be seen, on reference to the lists of Kings in the work now referred to, that, out of five dynasties of sovereign Princes who ruled over Gaura Desa or Bengal, prior to the Mohammedan conquest, the first only were Khetris ; the four last Koits.

being struck by the fact, that the entire business of settlement and collection, is described as lying between the husbandman and the officers of the government, called the Amil, Tepakchi, and Treasurer, conducted through the intervention of certain local functionaries, who are styled the Shikdar, Karkún, Mokaddam, and Patwári. It would be superfluous to quote particular passages, in illustration of what is so abundantly clear, from the whole tener of the portion of the work alluded to. It cannot surely be imagined, that, if a class of so much importance as Zemindars and Proprietors had then existed in the Khaliseh land, no reference should ever once be made to their existence and interests, in speaking of the payments of the Ryots to the Officers of Government; the settlements to be made with them; the measurements of the land; the accounts of the same to be kept, and the parties by whom those accounts were to be signed and countersigned. By the Shikdar* and Karkun, in this place, are meant, I apprehend, the Chowdri and Canungo Talúkdars, like those of Orissa, or persons performing similar functions. Shikdar implies very nearly the same as Talúkdar, the one designation signifying literally, holder or manager of a division; the other, holder of an allotment or dependency. The Chowdri, is, twice only, that I can discover, mentioned by that appellation express, throughout the Ayin Acberi; first, in the account of the Súbeh of Berar, and second, in the part about *Syerghal,* which is defined to mean either money, pensions, or land bestowed as *milk* and *madadmash.* The passage is this, "Various illicit practices having been discovered, the Syerghal of the Afghans and *Chowdris of the Khaliseh,* were annexed to the Exchequer."

The same indirect and incidental evidence may be drawn from Ferishteh, whose history extends down to the death of Acber in A. D. 1605. In the cases where he mentions Zemindars, it is almost invariably as, *Zemindaran o Rayyan* Deccan, Zemindars and Princes of the Deccan; Zemindaran

* In Bengal, Shikdar has become an hereditary title or appellation like Chowdri, Bakshee, Majmuadar, &c.

Kohestan, of the hills, &c. and they are represented as powerful chiefs possessing forts, armies, and political influence, such as to this day are the attributes of Khetri and Rajput Chiefs. It is curious enough, that, in nearly every instance where his translator Dow has introduced the word *Zemindar*, and more especially in those few interesting passages of Ferishteh, which touch upon the internal arrangements and institutions of the empire, the term has been gratuitously foisted in, and is not to be found in the original. As a guide to future enquirers, I shall point out some of these errors which have attracted my notice. Dow states of Sultan Balin, " Wherever the King marched, there was an order for the Súbehs, *Zemindars*, Foujdars, &c. to meet him." This is, merely the translator's explanation of the sense of the passage. The original is, " Sultan Balin made it a rule, that, whenever he returned from his army, the head-officers and respectable men, (Sudúr-o-Akábir,) came to meet him and offer presents." When the same Prince goes to Sunargaon, in pursuit of the rebel Togral, Dow makes the *Zemindar* of that place join him with his troops ; the original says only, " Dhoj Rai the *Zabit* or local governor." In the accounts of the reigns of Feroze 2nd and Alla-ud-deen, the word *Amra*, used by Ferishteh, is twice erroneously translated *Zemindar*. In the description of the latter reign, a still more important inaccuracy occurs, in the account of the King's measures, for improving both the condition of his ryots, and the revenues of the Royal Exchequer. *Zemindars* and *farmers* are not once mentioned by Ferishteh, but it is observed, that, as the *Chowdris* and *Mokaddams* were very oppressive in their behaviour towards the ryots (zeberdest), they were set aside, and their dues (*wajeh*) resumed, so that they who had before worn fine clothes, rode on horses and affected all the state of Amras, were now reduced to the lowest ebb of poverty. In the history of Mohammed Third's reign, the term Zemindar is again gratuitously introduced by Dow, as follows, " Nizam Bam, a *Zemindar*, possessed of some lands in Oude, collected a mob of the discontented farmers and rebelled." The original text, which is obscure in my copy, calls him an *Amir* of some kind, but never once makes use of the word Zemindar. Again, in pages 51 and

52, (vol. ii.) during Feroze Third's reign, Zemindars of Gorukpore and Kutter are mentioned by Dow, where Ferishteh distinctly calls them *Mokaddams*. *Zemindars* as well as Mokaddams of Atava, are, it is true, in one part spoken of by the Persian historian, but he elsewhere also alludes to *Rais* and *Rajas* of the same district. On the deposition of Abu Bekker, the translator observes, that the Zemindars, in various, parts of the empire, fell upon his followers and massacred them. The original says, "*the ryots and others* murdered them." Whilst the designation so often repeated, has been thus constantly introduced into Dow's translation, in a manner quite unwarranted either by the sense or language of the text, it is strangely omitted, sometimes, in parts where it does occur in the original. Thus, Ferishteh, speaking of the warlike operations of the Emperor Mohammed Third, and the vigour of his government during the early part of his reign, says, "He conquered the entire Carnatic, from sea to sea, taking possession of part of the country and obliging the Rajas of the other portion to pay tribute, and, from dread of his prowess, the *Rais* and *Zemindars* throughout the empire became submissive and obedient, and waited on the court to discharge their several duties and offices." Dow renders the passage simply as follows, "He soon after reduced the Carnatic, to the extremities of the Deccan, and from sea to sea, obliging all the *Rajas* to pay him tribute, by which means he again filled the treasury with money." The last of Col. Dow's mistakes, which I shall notice, is one that has led the ingenious author of the essay on Asiatic Monarchies, to imagine a support to one (though not a material) part of his argument, which does not in reality exist. The translator says of the famous Ferid, alias Sher Shah, "When he arrived at his Jagir (in the Súbeh of Jonpur,) he actually put his resolution in practice, by rendering justice to the poor, and reducing to order such of the *Zemindars* as opposed his authority;" now the original states simply, "The *Mokaddams* of several villages being turbulent and refractory, he undertook to reduce them to order." The word *Zemindar* never once occurs any where in or near the passage.

The only inference which I would draw from the above, is, that, in those

times of the Mogul government, when the financial system of the empire existed in full vigour, the misapplication of the term Zemindar to the Chowdris and Canungos of the Khaliseh lands, or to any inferior class, had not become general in Hindustan. That the designations, and, perhaps too, the offices and rights of the two classes, were in latter times much confounded together, is abundantly clear. It cannot, of course, be expected, when we consider the vague, mutilated, and imperfect state of all Indian histories and revenue accounts, that the origin and progress of this confusion should admit of being explained with such precision as to remove all doubt, or difference of opinion. The first symptoms of it are perhaps to be observed during Aurangzeb's reign.* After his death, and especially from the time of Mohammed Shah, and the early period of the eighteenth century, we meet with frequent instances, in Firmans and Perwannehs, of the word Zemindar being either added after Chowdri and Canungo, or substituted in lieu of those terms. In proof of this statement, I need only refer generally, to the numerous documents of the kind which are yet forthcoming, and may be consulted by those who feel interested in the discussion. It will be observed, that they always purport to address, and convey orders to, the whole body of persons connected, in any way, with the land in a Pergunnah or Chakleh, belonging to the *Khaliseh Sherifeh*—the Amils, Mutasaddis, Chowdris, Canungos, Mokaddams, ryots, and cultivators. It is superfluous to add, after what has been above stated, that the proper

* The famous grant of the Zemindari, &c. of the 24-Pergunnahs to the Company by Jaffer Ali Khan in 1764 A. D. furnishes an apt and curious illustration of the extraordinary confusion which prevailed latterly, in regard to the designation of the head classes of middle-men connected with the land. I shall therefore give a translation of it from the original, on the records of the Persian Office, "Let the Zemindars, Chowdris, Canungos, Talukdars, Mokaddams, Ryots and Inhabitants of the Chakleh of Hoogle, &c. in Bengal, know, that since the office (or service) of the *Zemindari*, and *Chowdrahi* and *Talukdari*, as below, has been assigned to the English Company, they must be allowed to enter upon the full exercise and enjoyment of all the duties and privileges of the same, and the Ryots within the limits of their Zemindari must experience no annoyance. Let the aforesaid Company constantly exert themselves to increase the cultivation, and let them pay regularly the Revenue of the estate into the Exchequer, &c. &c. Considering the above Company as *Zemindar* and *Chowdri*, and *Talukdar*, you will allow them to appropriate all the perquisites and advantages thereunto annexed, and feel assured that all their complaints and representations will be attended to." At the foot of the grant, the 24-Pergunnahs are specified by name. In this sannad, it may be remarked, there is little enough appearance of a grant of land and proprietary rights.

Zemindars or feudal Chiefs being distinctly circumstanced, and subject to the control of a different department of the state, viz. the Sultannat, or Nizámat, could never of course be included in these official addresses, from the Khaliseh or Dewanni department, to the husbandmen and officers of all classes on the lands composing the imperial domains. I must not omit to notice the famous Firman of the Emperor Aurangzeb Alemgir, addressed to Rashik Das, which has been translated and printed with former discussions regarding the Zemindari tenure. In this the "Amils, Chowdris, Canungos, Mokaddams, and Patwáris," are frequently mentioned in every part and, in *one* instance, the expression is varied by writing "Amins, Amils, *Zemindars* and others." If the date and translation of the document are strictly correct, it may be considered to evince an earlier application of the term Zemindar, to the officers of the Khaliseh land, than I should be on other grounds disposed to admit.

The second cause of error, respecting Zemindari and Talúkdari rights, which has occurred to me, is the failure to discriminate between the sale of lands and of the offices connected with them. In Cuttack, the offices of Talúkdar and Mokaddam, were, in conformity with the universal Hindu practice, strictly hereditary; the rent or revenue of the lands payable to the state had been fixed and settled with reference to the capability of the soil, and the established rules for the division of the crop; and certain perquisites and emoluments were allotted to all parties concerned in the business of collection and management, which (together with illicit gains) rendered those situations, though less valuable than at present, still objects of solicitude and ambition to the class who alone were likely to hold them, under the native administration. Such being the case, it was a frequent practice of the Mogul government, to oblige the Talúkdars or Mazkúri Mokaddams, when they had embezzled the revenues, or otherwise fallen into arrears, to dispose of a portion of what they held, when the price obtained was invariably paid into the local treasury in discharge of balances. The custom may be considered to indicate a recognition of property, on the part

of those classes of functionaries in their *offices*, (though the sales in question, termed Bye Sultani, in general bore little the character of voluntary and unconstrained transfers,) but certainly cannot be held to establish any title of property in the soil itself. In most cases, the thing sold is carefully defined to be the whole or a share of the Talúkdari and Chowdrahi, of the Talúkdari and Wilaity Canungoship, or of the Mokaddami of a Talúk or village. Occasionally there is some ambiguity, where a single village only is disposed of, but I am persuaded that no person could rise from the perusal of a number of such deeds of sale of the old times, without being satisfied, that they transfer nothing more than a hereditary official tenure in a village or villages, or portion of a Talúk, the profits attaching to which are defined in the margin or endorsement, as well as the fixed revenue assessed, called the Tankhah Raqmi and Jamma Kemal. I observe, that, in the very first of the cases brought forward in the appendix to Sir J. Shore's Minute, on the permanent settlement, as an instance of the sale of *lands* in Bengal, the thing disposed of is distinctly stated to be, two-sixteenths of the *Chowdrahi** of Kismat Pergunnah Fattehjanjpur, sold by Kamal Chowdri to Hari Sircar.

In like manner, I apprehend that the sense of the words *Malik* and *Milkíat*, which occur generally in the Cuttack deeds of sale, as in those of a similar nature in Bengal and elsewhere, must, in any consistent and intelligible view of the case, be held to apply only to the office and perquisites of the seller, implying that he enjoyed them hereditarily, by a tenure independent of the will of any local superior, in contradistinction to an office held by a mere Gomashteh, or ephemeral agent at the pleasure of another. Indeed, the *Milkiat*, or right of property asserted, is most commonly and distinctly stated to refer to the Chowdrahi,† Canungoi, and Mokaddammi. If such were not the case, it would follow that the same

* Situation of Chowdri.

† Or Anglice Chowdriship, Canungoship, and office of Mokaddam.

land might have two different kinds of absolute proprietors, for Mokaddams, who had the right of selling their Mokaddammi, existed (in Cuttack at least) on the Talúk of every Chowdri and Canungo, who might similarly dispose of his Talúkdari or a part of it. The difficulty vanishes when we view them, as, what they unquestionably were, offices connected with the land, of different degrees of authority and importance, each having its distinct duties and perquisites. In the Southern Pergunnahs, formerly under the Khúrda Rajas, where the heads of villages and accountants retain their old Hindi appellation of Padhan and Bhoï, we find them constantly selling shares of their *Padhanee* and *Bhoï Giri*, or offices of chief and accountant, with a proportionate allotment of the service lands and Rassúm attached; and these transfers, the real nature of which it is impossible to mistake, serve to throw a strong light on the character of similar transactions in other parts, where the use of terms of doubtful import, has invested the subject with a degree of ambiguity which probably will never be altogether dispelled.

Actual sales of *land*, or rather ground, were not however unknown under the native administration of Cuttack, and wherever it was clearly intended to sell such, so many bigas are plainly stated in the Qobalehs to be the subject of transfer, without any periphrasis as to the Zemindari, Talúkdari, or Mokaddammi right in them. Such sales however were confined to a particular description of land called *Arazi Banjar Kharij Jamma*, or ground, waste, unoccupied, and unassessed, in the disposal of which the Talúkdars and Mokaddams were allowed by prescription to exercise considerable privileges. If only two or three bigas were sold for the building of a house, patna, &c. or disposed of as rent free, the individual Talúkdar or Mokaddam executed the deed, with the sanction of the ruling power, implied by the necessary attestation of the *Sudder* Canungo, or his agent: if a larger quantity as a batti, or so, was to be assigned away, the deed of transfer was executed jointly by the Chowdris, Canungos, and Mokaddam, or Mokaddams. This mode of transfer gave rise to a curious tenure in the

district of Cuttack, called Kharideh or *purchased*, and Milk Kharidah, which often comprized much valuable land, owing to good land being fraudulently alienated, instead of the *Banjar* which the deeds set forth, and they formed a constant subject of scrutiny and resumption on the part of the Officers of the native government. The purchasers of such property often again transferred it to others, and the privilege of sale likewise seems to have been conceded to those who enjoyed rent free lands, under grants of the government as, milk, ayma and madadmash. A full discussion and investigation of these matters would however lead so far, that I am obliged to content myself with the above general reference to the principal considerations which strike me, as necessary to explain the land tenure in Orissa Proper.

I have inserted in the notes* translations of a few deeds of sale and sun-

* *Sale of a Chowdree's Talook attested by the Seal of the Cazee, and Signature of the Sudder Canoongoe's Goomastah.*

I who am Ruttun Mun Gujinder Chowdree, son of Hurdee Ram Gujinder Chowdree, son of——— inhabitant of Ma. Shamsoonderpore, in Pergunnah Byaung Sircar Budruck. Since I am altogether unable to pay the balances due from the four Biswa Talook, including Mouzahs Shamsoonderpore, &c. in the above Pergunnah, and have been placed in confinement on that account by the Ohdedar Mirza Bengalee Beg, I do of my own free will and consent sell for the sum of 104 K. 10 P. as per margin to Rasbeharee Mahapater, son of Oordhub Nurrinder Raee, son of Moorlee Dhur Hurrichundun, inhabitant of Mouzah Byaung Pergunnah ditto, the aforesaid four Biswa Talook, together with the Duftur Chowdraee which I have held to this day in proprietory possession [Kiala Haz ul yuom dur tuht tusrroof Malikaneh mi dasht]. Let the purchaser as long as he lives, and after him his sons and his son's sons exert themselves in bringing the same into cultivation and be careful to discharge the Government dues. He will enjoy the profits and make good any losses that may ensue. Neither I, nor my heirs, nor my brothers, nor their heirs, will hereafter have any right or title in the Talook. Should any one advance a claim, it will be false and unfounded. This is written as a Sunnud Kobaleh Talookdaree [or Deed of Sale of a Talookdaree.] Dated 28th of the month Rubbee Ool Awwul 1168 Umlee.

2 Mouzahs and 13 Biswas, Mokurree Ruqba. Arazee Battees 540 2 12 0

	Sa.	*Rs.*	*A.*	*G.*	*C.*
Mokurrureh Tunka Ruqmee, - - - - - - -	Rs.	937	11	0	0
Jumma Kemal Cowris, - - - - - - -	K.	547	4	0	0
	Kahuns	*P.*	*G.*	*C.*	
Ryottee, - - - - - - -		524	5	0	0
Moojraee, - - - - - - -		22	15	0	0

Total two Mouzas 13 Biswas, and the *Dufter* of 4 Biswas of the Pergunnah, viz. Shamsoonderpore 1 Mouza—Kath Moonda 1 ditto—Kistmut Husanabad 8 Biswas—Kismut Roopa 5 Biswas.

Deed

nuds, selected from a vast mass of such documents in my possession, which will serve to illustrate the argument maintained in the preceding pages.

Deed of Sale of portion of a Talook of Willaity Canoongoe.

Purchaser Meer Kumal Ood Deen, son of Meer Moosabit, son of Meer Umad; Seller Juggunath Maintee, son of Muhee Maintee, Canoongoe Willaity of Pergunnah Coordais, in the Sircar of Cuttack. Since I the Seller have to this day held the whole and entire Talookdaree and Willaity Canoongoeship of Mouza Jinkar Sowanlo, in the above Pergunnah, my Talooka [Talooka Bundeh ki dur tuht o tusurroof Malikaneh khood dasht] in full proprietory possession, I now sell the same with all the rights and privileges appertaining thereto, as Meel, Hireeq, Ashjar, Ahjar, &c. &c. of my own free consent, for the sum of one hundred Kahawuns of Cowris, a fair and even price, to the above mentioned Purchaser. Having received the amount I have paid it into the Treasury of the Fotedar of the Pergunnah in discharge of my balances. Let the Purchaser cultivate the above Village, pay the public dues and bring it under his Talookdaree and Canoongoe management [bu Talookdaree of Canoongoe khood uml numoodeh]. Neither I, nor my heirs will hereafter have any claim.

1 Mouza.

Mokurrureh Ruqba Arazee Battees,	-	-	-	-	-		113	0	0
Ditto Tunkha Ruqmee,	-	-	-	Sa. Rs.	273	0	0	
Ditto Jumma Kumal Couris,	-	-	-		607	0	0	
Price of Talookdaree and Willaity Canoongoeship, to be separated, Kah.					100	0	0	

from the Talooka of the Seller Jugunnath Maintee, and entered as a Talooka Muzkooree, dated 15th Showal, 1132 Umlee.

On the back the Chehreh Bundee, or descriptive Roll of the Seller is given.

Deed of Sale of Ground.

I who am Sudanund Mahapater, son of Gopee Mahapater, son of Moorley Mahapater, Chowdree of Pergunnah Byaung, in the Sircar of Budruck, in the full possession of my senses, of my own free consent declare that I have sold a parcel of about 11 Bigas 19 12 of land *Bunjur Kharij Jumma* 26 Dustee measurement on the Ruqba of Mouza Dhurinkuntpore, my Talooka, (or dependent on me) which as specified below has to this day been in my possession, with every thing on and belonging to it to the revered Saeed ood Deen Mohummud, for the sum of Sicca Rupees 19 3, the fair and current price. Let him dispose of it as he likes; should the Hakim ever claim a Jumma from it, I will be answerable.

Here follows a specification of boundaries. Dated 10th Rejeb, 1144 Umlee.

Deed granting Ground free of Rent, by Talookdars of a Pergunnah jointly.

We who are Futteh Khan Chowdree, Bamdoe Canoongoe and Kishen Canoongoe Zemindars of Pergunnah Saeed Abad in the Sircar of Cuttack, declare as follows: Since Bishnoo Churn Doss Birjabashee, inhabitant of Mouzah Nujal in Pergunnah Deogaon Bissee has no means of subsistence and is unable to give food to the numerous Fakirs and Byshnoos, who are constantly resorting to him, and thereby suffers extreme distress, we have therefore of our own accord and free will appointed 7 Battees 7 Bigas 11 Ghoonts Arazee Bunjur kharij Jumma, from the Ruqba of the Mouzahs attach to our Talooks as below, to be hereafter held by him as Khyrat. Let the above-mentioned take possession of the Land and bring into cultivation and expend the profits in maintaining himself and other Fakirs and Byshnoos; should we or our heirs ever attempt to resume it, may we go to hell. This is given as a Sunnud Khyrat.

Here follows a specification of the Villages in each Talook from which the Land was granted. Dated 16th Jumadool Awwul, 1155 Umlee.

Another Selling Ditto.

We who are Jye Kishen Raee Canoongoes Sudder, Ramchunder Bhooyan Canoongoe Willaity, Deen Mohummud Chowdree, and Sirdar Puttee, Chundoo Naik, Rajib Naik, &c. Moquddums of Pergunnah Sunnawut, in the Sircar of Budruck declare as follows: Since about 1 Battee 8 Bigas 12 Ghoonts of Land, on the Ruqba of Mouzahs Khundibra, Pustapore, and Mundial, our Talooks had become entirely waste and deserted [wyran oftadeh] we have measured out the same with the authorized Pudkeh, and have sold it for the sum of Sa. Rs. 35 to the respected Sir Must Khan according to legal forms. Let the aforenamed Khan take possession of the same and proceed to establish garden and Putna with the fullest confidence and security. Neither we nor our heirs will ever hereafter have Davee, Dukhl, or Huq, of any sort, in the above-mentioned parcel of ground. Dated the 11th Sowal, 1121 Umlee.

Here follows the usual Chuckbundee.

Deed of Sale of the Zemindaree of a Village.

I who am Busunt Raee, son of Sudashib Raee, son of Jeet Raee, inhabitant of Kusbeh Pergunnah Hurrihurpore, in the Sircar of Cuttack, in the full possession of my senses declare in this Mujlis, that the Zemindaree and Talookdaree and Moquddumee of Mouza Naroo, in Pergunnah Athaees has been heretofore in my possession (dur taht i bundeh). Being unable from land falling out of cultivation to pay the public assessment, I have of my own free consent disposed of the Zemindaree of the said Mouza, for the sum of 500 Kahuns of Cowris of Luchmun Raee, son of Hur Raee, son of Baboo Raee, and have received the amount from the Tehvil of Narain Dutt Gundooah. Let the purchaser take possession of the Zemindaree, &c. of the above Mouza, the Bhagat, Khanabaree (or Dehee) Land, the Cocoanut Plantations, &c. whatever in short attaches to it, and exerting himself to extend cultivation, and let him pay regularly the Government dues. Neither I, nor my heirs will hereafter advance any claim on the above Mouza. This is given as a Kobaleh and Kubzool Wusool. Dated Rubee ool Awwul, 1208 U.

Sale of a Moquddumee.

I who am Bynsee Sawunt Singhar, son of Dasruttee ditto, son of Inderjeet ditto, Moquddum of Mouza Isaupore under the Talookah of Jugganathpersaud in the Sircar of Budruck. Since I have hitherto held the Moquddumee of the above Mouza in full proprietory possession (dur taht o tusurroof Malikaneh khood dashtum,) but am now unable to pay the public Revenue assessed thereon; therefore of my own free will, in full possession of my senses, I sell the Moquddumee of the above Mouzah for the sum of 421 Kahuns of Cowris to Issun Sawant, son of Bhagirutte Sawunt, son of Bynsee Sawunt, Moquddum of Dewul Dehee on the above Talook. Having received the purchase money, I have paid it into the Tehvil of Hurree Sahoo, Fotedar of the above Talook. I hereby declare that let the purchaser taking possession of the Moquddumee of the above Village, exert himself with full confidence in the cultivation of it and pay the Government dues. Neither I, nor my brethren, nor my heirs will hereafter advance any claims thereon. This is given as a Sunnud Kobaleh Moquddumee.

ONE MOUZA.

Moqurrureh, Arazee,	107	12	0
Ditto Tunkhah Ruqmee, Rs.	203	8	0
Ditto Jumma Kumal, Khs.	151	12	0
Ryottee,	145	10	0
Mujraee,	6	2	0
Kahuns, Cowris,	151	12	0

Dated 21st Ramzan, 1178 Umlee.

Deed

Deed of Sale by Pudhans of Mouza Odeypore in Pergunnah Limbaee. [*Oria.*]

Dated Wednesday, 27th Assin, in the 43d Ank or year of the reign of Raja Beer Kishore deo Maharajah.

We four persons, Dhurnee Das, Koornee Das, Kesub Das and Seba Das, Pudhans of Mouza Odeypore in Pergunnah Limbaee, having this day received from Kishen Patjoosee Mahapater, inhabitant of Putna Kishen Sarunpore *Hat* Delang in the above Pergunnah, the sum of Rs. 76-8 in cowris, or at the current rate of exchange of 2k. 4p. per rupee, altogether 172 kahuns, which is a fair price, execute the following deed of sale. We sell to you our Pudhanee or right of management (huki-serberah) in the whole of the said village of Odeypore, the Ruckba of which is about 15 battees, 10 bigas, and also our Hita Pudhanee or service lands, which are 3 bigas Dehee, 3 bigahs Kala, and 7 bigas Sarud, altogether 13 bigas. You will hold the Pudhanee of the village as long as the sun, moon and earth last. Should any Sawunt or chief, or our heirs or any other claimants advance a claim, we will be responsible, so long also you will enjoy the Hita Pudhanee or service lands, which we have sold, with every thing above and beneath, water, dry land, mineral productions, wells, wood, stones, fruit trees, &c. You may cut down and plant trees on the ground and act as you please with the above Hita, also you will receive the customary Sarhee (Siropa) of Sri Juggunnath Jeo. This Deed will stand for ever as a Kiria Putr and Bishodun or receipt.

Witnesses, several Pudhans and Bhooees.

Deed of Sale by a Bhooee or Village Accountant.

Dated Monday, 25th Assin, in the 17th Ank or year of the reign of Biresree Raja Dirb Sing Deo Maharajah.

I who am Rugoo Nath Maintee, Bhooee of Mouza Gowree Pot Matiapara in Pergunnah Limbaee, execute in behalf of Sunkur Putnaik, inhabitant of Mouza Odeypore the following Deed of Sale, having this day received from you the sum of 35 rupees in cowris or kahuns 83-2 at the rate of 2-6 per rupee, which is a fair and even price, I hereby sell to you in exchange for that sum the Bhooee Giri or Office of Bhooee of the said Mouza, which was formerly purchased by my father with the sanction of the Maharaja. The Ruckbah of the village is about 85 battees (or bigas 1,700). I sell you likewise my Hita lands which are established at the customary rate of 12-8 per battee, with my Dustooree and Russoom. You will enjoy the office of Bhooee and the Hita land as long as the sun, moon and earth last. Should any Sawunt (chief) or Huqdar, or neighbour or heirs of mine advance any claims, I shall be responsible for satisfying them. Till the day of resurrection you will possess the Hita land, and every thing above and beneath it—water, dry land, mineral productions, ponds, wells, trees, stones—you may cut down and plant trees at your pleasure. This is given as a Deed of Sale and receipt.

PART II.

Chronology and History.

THE learned Natives of Cuttack maintain, that, in latter ages, upon the decline of that great monarchy of upper India, whose history seems destined to remain for ever buried in the darkness of fable and uncertain tradition, four principal thrones or races of Hindoo Princes ruled over the country, viz. the Narapati, the Aswapati, the Chatter or Chatrapati, and the Gajapati. By the first they understand the Ram Rajas or Sovereigns of Teligana and the Carnatic, who opposed the earlier Musselman invaders of the Deccan, under Sultan Ala-ud-din; the second throne they place in the Marhatta country, and intend to designate by the epithet, no doubt, the old and powerful Rajas of Deogir or Tagara, of whom frequent mention is made in Ferishteh; by the third* they mean apparently the celebrated line of Rajpút Princes whose descendants are found at Ambher and Jyepur; the fourth is the title given to the Monarchs who ruled over Orissa, from the earliest times of which any authentic records are preserved. The origin of these thrones or sovereignties, they trace back to the four great feudal vassals of an empire, which they firmly believe to have extended over the whole of Hindustan, from the commencement at least of the Cali yuga; and they explain their titles by reference to the nominal offices held, or services performed by them, when in attendance on the Lord Paramount or supreme Raja at the Court of Hastina (Hastinapura) and Delhi. Thus the Narapati† is supposed by some to have been the commander of the armies: the Aswapati, the lord or master of the horse; the Chatrapati, the bearer of the imperial umbrella or standard of

* I should myself be inclined to place the *Chatrapati* Rajas in the Marhatta country, as Sri Chatrapati was one of the titles adopted by the Peshwahs, and it seems reasonable to suppose that they may have borrowed it from an ancient local dynasty so designated.

† The titles imply respectively, "Lord of Men;" "Lord of horses;" "Lord of the Umbrella," and "Lord of Elephants," or as we should say, "Master of, &c."

state; and the Gajapati, the master of elephants. Others have it that the epithets were derived from the designations of the four gates of the palace, at which the chiefs in question took their stations, when present at the capital.

The recollections preserved of these races of Princes are by no means confined to Orissa. In the Canara *Raja* Padhati translated by Dr. Buchanan, the fabulous monarchs are first described as usual beginning with Yudhisht'hira, and the author then states, "After this Narapati, Gajapati, and Aswapati, three thrones were established." He then details the Princes of the Narapati line, who ruled over that portion of the Deccan. They are now probably forgotten in upper India, but seem to have been perfectly well known and familiarly spoken of, even at Delhi, only two centuries ago. There is a highly curious passage in the Ayin Acberi, where treating of the game of cards with which the Emperor Acber recreated his royal mind, the writer observes, "This is a well-known game. At first the pack consisted of twelve kings with eleven cards dependent upon each in the following order. First, *Aswaput*, the king of the horses. He is painted on horse back like the king of Delhi, with the Chutter, Alum, and other ensigns of royalty. Second, *Gujput*, the king of elephants, is mounted on an elephant like the king of *Orissa*. Third, Nurput, the king of men. Like the king of Vijayapur, (Quere, Vijayanagara?) he is seated on a throne and has different kinds of soldiers attending him on foot," &c. &c.

It is of the fourth and probably least important race of Hindu monarchs of the middle ages, the Gajapatis* of Orissa, that I propose to offer an account in this part of my paper; but to render the chapter complete, I shall add a sketch of the history of the province down to the date of the British conquest, A. D. 1803.

The earlier native histories of the country are of the legendary or fabulous

* Derived from Gaja, an elephant, and pati (potens,) a master or potentate.

class, copied from the Púranas, but embellished or disfigured by a plentiful admixture of local traditions. Their later annals assume an air of authenticity about the date of the accession of the family called the Kesari Vansa, 473 A.D. prior to which the accounts are so replete with obvious falsehoods, contradiction, inconsistency, and anachronism, as to be equally unintelligible and unworthy of notice. The memory of a few great names and events, only, has been preserved up to the fourth and fifth centuries of the Christian æra, and to adapt these to their favorite system of chronology, the brahmins, who will never admit want of information on any subject, have been obliged to give an expansion to the reigns of their traditionary Rajas, in some cases of five or six hundred years, and in all, far beyond the natural or possible term of the human life.* As, however, it will not be uninteresting to those curious in researches into Hindu antiquity, to learn what traditions the natives of this district have preserved regarding their history in the earlier ages, I shall begin my sketch of the contents of their annals from the remotest period to which they profess to go back.

The sources from which my information has been chiefly derived are, 1st. A work in Sanscrit called the Vansavali, belonging to a learned brahmin of Púri, said to have been originally composed by some of his ancestors three or four centuries back, and continued down in the family to the present date. 2d The chapter of the Mandala Panji or Records preserved in the temple of Jagannath, called the Ráj Charitra or "Annals of the

* Mr. Mill's observation on Hindu history does not hold good with regard to Orissa; "Whilst we receive accounts, the most precise and confident regarding the times of remote antiquity, not a name of a prince in after ages is presented in Hindu records. A great prince, named Vicramaditya, is said to have extended widely his conquests and dominion and to have reigned at Magud'ha 396 years after Chandrabija. From that time *even fiction is silent.* We hear no more of the Hindus and their transactions till the era of Mohammedan conquest; when the Persians alone become our instructors." The writings called classical indeed conduct us no further than the period indicated in the above passage, but the detail which I propose to give will show (whatever may be thought of the value or authenticity of my materials) that the Hindus of this province *do* possess accounts, which carry an appearance of truth, and which they themselves believe, of their more modern kings and their actions.

Kings" in the Úria language, which records are stated to have been commenced upon more than six centuries back, and to have been since regularly kept up. 3d. Another Vansavali or Genealogy written in Sanscrit on leaves of the Palmyra tree, procured from a brahmin living in the family of the Raja of Puttia Sarengerh, one of the branches of the royal house of Orissa. Less certain and trust-worthy guides than the above, are to be met with in the numerous Genealogies, or Bansabali Pothis, as they are vulgarly termed, possessed by nearly every Panjia or Almanac maker in the province. They in general abound with errors and inconsistencies, but occasionally a few facts or illustrations may be gleaned from them.

Conformably with the notion, above stated, of the existence of a great empire at Delhi, to which all other Rajas stood in a vassal and feudatory relation, the annals of Orissa commence with the death of Krishna, the opening of the Cali yuga or evil age, 3001 B. C. and the reigns of Jojishtee Deo, or Yudhisht'hira, Parikshita and Janamejaya. Twelve years after the setting in of the Cali yuga, in the month of Cheyte, when the moon was in the lunar mansion or Nakshatra called Purv Asárh, at the moment of the rising of the seven Rishis, or constellation, called the Great Bear, Parikshita the son of Abhimanyu and grandson of Arjun, is said to have ascended the imperial throne of India. He reigned 757 years, and his son Janamejaya 512 years. There is an ancient temple at Agráhát in killah Dáljúra about eight miles north of the town of Cuttack, which the brahmins of the place say was visited by this Raja Janamejaya during his progress over India, with all the feudatory Rajas of the country in his train ; and they point out the spot where he performed the sacrifice for the destruction of serpents, to revenge the death of his father. The circumstance merits notice from its tallying with a somewhat similar tradition, recorded in an inscription at Bednore, communicated to the Asiatic Society by the late Colonel Mackenzie, (vide Researches, vol. ix.) and what is further curious connected with the place, is, that the ground

around is strewed with numerous small stone pillars, shaped like temples in miniature about three feet long, exactly resembling those found in Khúrda at an acknowledged seat of Jain worship, which the brahmins of Agráhát say amounted formerly to several hundreds, and were set up by Raja Janamejaya to commemorate the great sacrifice there performed; or according to other accounts, to stand as substitutes for those Rajas or Vassal Lords of India, who were not in attendance at the ceremony.

After these celebrated heroes of Indian antiquity, we have a list of other Princes, whose names I have no where else met, viz. eight Rajas who reign for the moderate space of 1636 years. Many of them are obviously merely Rajas of the province, but in relating the succession of reigns, no distinction is drawn between those personages who were local or dependant princes, and those whom it is intended to represent as the monarchs of a large part of India. Goutama Deo, the second in succession from Janamejaya is said to have added the country from the Mahendra Mali hills in Ganjam, as far as the Godaveri, to his dominions. Mahendra Deo, his son, founds Raj Mahendri or Rajamundry. Shewak Deo, a very religious Prince is assiduous in his devotion at the temple of Jagannáth. In the reign of Bajranath Deo, the Yavanas are said to invade the country in great numbers from Babul Des, explained to mean Iran and Cabul, but they are finally driven back. Then follows an incomprehensible story, involving some strange anachronism, about Imarút or Himarut khan, who comes from Delhi with a large army and fights the Raja. His successor, Sarsankh Deo, a warlike prince, is attacked by another Khan, whose name is variously written, and always so incorrectly spelt, that it is impossible to unravel it. The Raja defeats the invader and emboldened by his success, advances upon Delhi, and reduces a great part of the country. In the reign of Hans or Hangsha Deo, the Yavanas again invade the country in great force from Cashmir, and many bloody battles ensue.

Respecting these Yavanas, who are so often mentioned in the legendary

portion of Orissan history, I should observe that the word in all the original Uria accounts is written *Jaban*, and the natives whom I have employed to translate both these and the Sanscrit Vansavalis, always render it *Mogul*. Who they really were, if they ever entered the country at all, may be plausibly guessed in some instances from their being said to come from Babul Des and Cashmir, by which the Hindus understand generally Persia, Affghanistan, and part of Tartary. Nothing however can exceed the looseness and confusion of my authorities, in speaking of countries and nations beyond their own immediate frontier. They often bring the Yavanas* from Delhi, by which appellation they seem to point to some great monarchy or monarchies lying to the northward and westward, of which they have preserved an indistinct notion, rather than to the particular city so named. Dr. Buchanan has remarked a similar degree of confusion on this same point in the historical recollections of the brahmins of the southern countries of India. He observes, vol. iii. page 113, chapter xv. "Who were these Yavanas? The word properly signifies an European, but as the Hindus speak with great confusion concerning the northern and western nations, it is often confounded with the Mlechchas and Turks, Arabs or Tartars, and all these terms are frequently applied to the Mussulman."

Next in the series of kings, comes Raja Bhoja, who is made to reign 127 years, that is from about B. C. 180 to B. C. 53. He was, according to the Orissan Chronicles, a brave, liberal, just and merciful prince. He conquered the whole of India and took tribute from all the Rajas of it. His Court was adorned by the presence of 750 eminent poets, the chief of whom was Calidasa, author of the 752 Ashloks called the Chanak or Chataka, and Maha Nataka. Raja Bhoja invented boats, the weavers' loom, and wheeled carriages, or at least in his time the use of them first became common. In this reign the Yavanas from Sindhu Des invaded the country in great force

* The section before quoted from the 10th chapter of the Institutes of Menu, distinctly classes *Yavanas* as one of the degraded races of Cshatriyas or *Hindus*.

but Bhoja discomfited and destroyed them, and afterwards captured many of their possessions and cities.

Sri Bickermajit or Vicramáditya, (whom some call brother, and others son of Bhoj Raja, whilst other accounts state no connection,) succeeded to the throne and reigned 135 years. He was master of all sciences and a great magician. Having subjected the Ashta Vetála or eight demons to his control, he could perform many miraculous feats, such as travelling one hundred jojuns or 400 cos per day, extinguishing fire, and stopping the current of water by the force of his incantations. So great was the fame of his wisdom, that he was on one occasion taken up to the heaven of Indra to settle a fierce dispute which had arisen amongst the Deotas respecting the relative merits of two of the heavenly Choristers, named Rembhá and Úrvasí. His decision in the important matter submitted to his arbitration, obtained great applause, and the gods dismissed him with a present of the famous magic throne called the Sinhásana. On returning to the "*Martyaloka*," or region of mortals, much edified by what he had seen above, he became sole and undisputed Maha Raja of the whole face of the earth, and received the title of Raja Adhiraj or Supreme Raja of Rajas. Through fear of his power, the Yavanas all left the country. At last came Sáliváhana from the Deccan, who attacked and conquered Vicramáditya, put him to death, and assumed the reins of empire. From that period the æra called the Sacábda prevailed, and was introduced into all the Pánjis.

I cannot pass over the above most important event in Indian history, marked by the introduction of a new epoch into all the southern countries, without specifying precisely how my different authorities express themselves regarding it, though unfortunately they throw no new light on the question of who this mysterious personage Sáliváhana really was? and whence he came? The extract from the Mandala Panji says, "After many years Saca Deo Brahma Raja of Pratishthánapura came with a large "army, attacked the Maha Raja Vicramáditya, and having conquered

"and destroyed him, fixed the seat of his empire at Delhi." The author of the Vansavali states, "With the assistance (or at the instigation) of the "Yavanas, a person named Nri Nikas Sáliváhana Saca Hara* fought many "battles with the Raja, and deposed him from the throne of Delhi. From "that period begins the æra called the Sacábda."

It will be curious, and not altogether unprofitable, to compare these relations with a passage in Major Wilford's distinguished Essay on Vicramáditya and Sáliváhana. He says, page 123, "In the seventh section of the "Vrihat-catha, we read, that there was a king of Pátaliputrapura, called "Vicramáditya, who hearing of the growing power of Nrisinha, king of the "consecrated city or *Pratishtána* called to his assistance the *Gajapati*,† "(lord of the Elephants or king of Thibet,) and the *Aswapati*, (lord of "Horses or Horsemen, or the king of Persia.) The confederates took the "field but were defeated by Nrisinha Nripa or Sáliváhana with an incredi-"ble slaughter. Vicramáditya fled with the utmost precipitation," &c. In another part it is observed that Vicramáditya "obliged Cataca (Cattaca) to submit;" probably brought it into a dependant and tributary relation to his government, which may account for his being classed amongst the ancient Sovereigns of the province.

From the commencement of the Cali yuga to the fall of Vicramáditya, Thirteen Rajas are made to reign for the monstrous term of years 3173, viz.

	Years.
Yudhisht'hira Deo,	12
Parikshita,	757
Janamejaya,	516
Sambar or Sancara Deo,	410
Gautama Deo,	373

* An ignorant translator employed by me, rendered *Saca Hara*, *Sheikh Hara*.

† Query, the Raja of Orissa and the Sovereign of the Marhatta country?

Mahindra Deo,	215
Ashti Deo,	134
Shewak or Ashok Deo,	150
Bajra Nath,	107
Sarsankh,	115
Hansh or Hansa,	122
Bhoja,	127
Vicramáditya,	135*
Total	3,173 years.

After that event, the æra of Sáliváhana which dates its commencement from A. D. 77 in Orissa, is used in all the accounts, and we now come to reigns of a probable and moderate duration, the first dawning of an approach to the authentic period of the native history.

The Raj Charitra goes on to state, "Afterwards Karmajit, (Cramáditya,) "son of the *above*, (Query, Vicramáditya?) ruled over Or Desa or Orissa. "He was devoted to the worship of Jagannáth and died A. S. 65." Then follow four unimportant reigns remarkable only for mention of invasions by the Yavanas. The Rajas names are as follows:

	Years.
Bato Kesari, reigns	51
Tirbhobun Deo,	43

* It may be observed that a list of this description uniformly introduces the genealogies of every race of princes in the Dekhin, and originates with an attempt to fill up a blank in the local histories, with persons borrowed from the Puranas or from tradition. The age of Bhoja is now well established as being assignable to the ninth or tenth century, this being made therefore anterior to Vicramáditya who lived before our æra shews with what imperfect knowledge of dates and persons these lists are compiled; neither was a son of Bhoja named Vikramá which might form a plausible excuse for the confusion, it being ascertained by inscriptions, older probably than these lists, that the son and successor of that prince was named Kalabhoja. In point of history and chronology however neither Vicramá nor Bhoja have any connexion with the dynasties in which the Chroniclers of the Peninsula have enrolled them.—*Note by the Secretary.*

Nirmal Deo, - - - - - - - - - - - - - 45
Bhima Deo, - - - - - - - - - - - - - 37

In the time of Subhan Deo the next in the series of kings, who succeeded to the Raj A. D. 318, relation is given of an extraordinary and incomprehensible occurrence, of which I am quite unable to offer any explanation. It has obviously been strangely distorted by popular tradition, though in all probability possessing a foundation in fact.

The following is an outline of the story alluded to. A Yavana, or foreigner, named Rakta Bahu, (the Red-Armed,) having assembled a large army with the intention of invading Orissa, embarked his troops on vessels with numerous horses and elephants, and having made the coast, anchored at a distance from the khetr of Jagannáth, hoping to take Púri by surprise. The dung, straw, &c. of the horses and elephants, happening however to float ashore in quantities, attracted the notice of some of the people of the town. They immediately reported the unusual appearance to the Raja, who guessed that some powerful enemy was coming to attack him. Seized with a panic he took the image of Sri Jeo or Jagannáth out of the temple, lodged it in a covered cart with all its jewels and utensils, and fled away to Sonepur Gopalli, the most remote town on his western frontier. The Yavanas landed, and not finding the prince, plundered the town and temple and committed great excesses every where. The Raja's alarms increased on receiving intelligence of the proceedings of the invaders: he now buried the image under the ground, planted a *ber* tree over it, and himself fled farther into the jungles. The Yavanas, unable to understand how he had escaped them, began to institute enquiries on the subject, when some of the low people of the coast informed them of the way in which their approach had been discovered. Enraged with the ocean for disclosing his secret, Rakta Bahu drew out his armies to chastise its waters. The sea, on observing such formidable preparations, retreated for nearly a cos—the infatuated Yavanas rushed on—when the tide sud-

denly returning with tremendous noise and fury, swallowed up a great portion of the army and inundated the whole country to a frightful extent. The flood reached inland as far as the Baronai Pahar of Khúrda, taking with it immense quantities of sand. It was at this time that the Chilka lake was formed by the irruption of the waters of the ocean.

The Raja died shortly afterwards in the jungles. His son Indra Deo succeeded to the title, but was captured and murdered by the invaders. A Yavana dynasty then ruled over Orissa for the space of 146 years. Thus were completed years 396 of the Sacábda.

Possibly the tradition which I have described above, may have some connection with the fierce religious disputes which raged between the worshippers of Brahma and Buddha about the period in which the invasion of foreigners and the flight of Jagannáth is placed, and which as is well known terminated in the expulsion of the latter from the continent of India. A real irruption of the ocean may have occurred in the same age, and this natural calamity, the ever active invention of the Brahmin Chroniclers chose to ascribe to the authors of the bloody wars, revolutions, and other moral evils, which afflicted the country at the time. But it were vain to speculate farther on the origin of an account which is perhaps altogether the work of imagination, and the unravelling of which at all events would require the exercise of much more learning and ingenuity than I can bring to the task.

We come now to the accession of the Rajas called the Kesari *Pat* or Vansa, A. D. 473, from which period I should be disposed to date the commencement of the real history of the province, but before entering upon the account of their reigns I should observe that there is nothing in the preceding relation to explain what is meant by the "eradicated race of Utcala,"* alluded to in the inscription on the pillar at Buddal, which Major Wilford refers to the expulsion of a martial race of Princes from

* Vide Asiatic Researches, vol. i.

Orissa by the Carna Emperors of Behar, prior to the accession of the Gujapatis; but it would obviously be easy enough to imagine a space for the occurrence of such a revolution, in some of those chasms of upwards of a century's duration, which intervene between many of the early reigns.

No information whatever is afforded as to the origin and pedigree of the Princes called the Kesari Vansa or Kesari Bans. The founder of the new dynasty was Jajati (Yayáti) Kesari, a warlike and energetic prince, but who he was or whence he came we are not apprized. He soon cleared his dominions of the Yavanas who then retired to their own country. His Court was held at Jajepur where he built a palace (Nour) and castle, called Choudwar, or the mansion with four gates. The most important event of his time was the recovery of the image and the restoration of the worship of Jagannáth. Directed by certain omens and supernatural appearances, he proceeded to the Purushottem Khetr to institute enquiries regarding the idol and the temple, when the brahmins of the place informed him that a tradition existed amongst them of Sri Jeo (Jagannáth) having been carried off, upwards of a century and a half before, to Sonepur Gopallí, on the invasion of a person called Rakta Báhu, where the form had ever since remained concealed from mortal eyes. This intelligence induced the Raja to make a visit to the jungles of Sonepur. Miraculously guided, he discovered after some search the place where Sri Jeo had been buried, cuts down the ber or banyan tree which overshadowed the sacred spot, and finds the image or images encased in a stone vault, much decayed and disfigured. His next care was to search out the Dytapatís and Shewaks, or officiating priests, descended from those who formerly fled from Púri, and having discovered several of them in the Rattenpur country, he consulted with them how the worship of Jagannáth should be revived in all its ancient splendour. The formation of a new image being considered an indispensible preliminary, the priests proceeded into the woods to look for a proper *daru* or piece of timber, and having found one with all the requisite qualities indicated by the

shastras, they brought it to the Raja, who, filled with pious zeal, clothed both it and the old images in rich robes, and conducted them in great state to Púri. A new temple was then erected on the site of the old one, which was found to be much dilapidated and overwhelmed with sand. The four images were afterwards duly prepared and set up on their sinhasan or throne with much pomp and solemnity on the 5th of Kakara (Cancer) the thirteenth year of the Raja's reign, amidst the shouts and rejoicings of the multitude. At the same time the necessary officers were appointed, feasts and festivals established, sásans founded, and the whole country around Púri assigned as endowments for the maintenance of the temple. On this memorable occasion the Raja received by general acclamation the title of the second Indradyumna.

Towards the close of his reign, Raja Yayáti Kesarí began the buildings at Bhuvaneswar, and died A. D. 520.

The reigns assigned to his two successors, Suraj Kesarí and Ananta Kesarí, are probably of too long duration, being altogether ninety-seven years, and are distinguished by nothing remarkable, excepting that the latter prince began the building of the great temple at Bhuvaneswar.

He was succeeded A. D. 617 by Lalat Indra Kesarí, a personage of high repute in the legends of the Bhuvaneswar temple, in consequence of his having built or completed the great pagoda at that place sacred to Mahádeo under the title of the Ling Raj Bhuvaneswara, in the year of Sáliváhana 580 and A. D. 657. He also founded there a large and populous city containing seven *saïs* and forty-two streets which became the capital of the Raj.

An uninteresting series of thirty-two reigns of the Kesarí Princes follows, extending through a period of 455 years, of the history of which little is given excepting the characters of the Rajas and some absurd stories

connected with the temples of Jagannáth and Bhuvaneswara. A few particulars worth noticing however may be gleaned from the accounts, such as that the rate at which the ryots were taxed by the sovereign was five káhans of cowris per batti, or about one anna per biga. One of the Rajas named Bariya Kesarí, in a time of emergency, raised the demand for revenue as high as one káhan of cowris per biga, or four times the former amount, but his successor Súraj Kesarí reduced it to the old rate. Raja Nirúpa Kesarí, a martial and ambitious prince, who was always fighting with his neighbours, is said to have first planted a city on the site of the modern Cuttack, about A. D. 989. The reign of Markat Kesarí was distinguished for the construction of a stone revetment, or embankment faced with that material, (probably the ancient one of which the remains are yet to be seen), to protect the new capital from inundation A. D. 1006; and Madhava Kesarí has the credit of building a fortress of vast dimensions at Sarangher.

Different stories are related of the extinction of the Kesarí family. The Raj Charitra says, that the last of the line died childless, when at the suggestion of the deity, another family were brought from the Carnatic by Basudeb Banpati and placed on the throne. The Vynsavali ascribes the change of dynasty to a dispute between the Raja and this same Basudeb Banpati, a brahmin and powerful officer of the court, who having been driven with indignity from the royal presence, went to the Carnatic and instigated a person named Chúrang or Chor Ganga to invade Orissa. He conquered Cuttack, on Friday, the 13th of Assin, A. S. 1054 or A. D. 1131, and thus acquired the sovereignty of the country. Both accounts agree in giving the above as the date of the accession of Raja Chúrang Deo. This personage, whatever his real origin, is fabled to have been the offspring of the goddess Ganga Sana or the lesser Ganges (Godaveri) by a form of Mahadeo. With him began the race of princes called the Ganga Vansa, or Gangbans line, who ruled the country for about four centuries, a

period fertile in great names and events of importance, and which forms unquestionably the most brilliant and interesting portion of Orissan history, if such terms may be applied to the annals of a hitherto unknown dynasty, governing one only of the many provinces which now constitute the British empire in India.

Chúrang, or Sarang Deo, held the reins of government for twenty years, and conformably with his supernatural origin is believed to have been a skilful magician. It is said of him that he established the records of the Jagannáth Temple called the Mandala Pánjí, and was a great worshipper of certain forms of Devi to the neglect of all the other gods and goddesses. The memory of his reign and of his singular name, which is certainly not an Uria one, is preserved in a Sai or quarter of the town of Púri, with a tank called the Chúrang Sai. Tradition also ascribes to him the building of forts and palaces both at Sarangher and Cuttack Choudwar.

His son Gangeswara Deo succeeded A. D. 1151. His dominions reached from the Ganges to the Godaveri. He had five kutuks or Royal metropolises, viz. Jajpur, Choudwar, Amrávati, Chatta or Chatna and Biranassi, the modern Cuttack. The account which places Amrávati, a town near the Kistna in the heart of the Deccan, amongst the capital cities of this Raja, is one of the commoner genealogies to which I attach no great degree of credit. It is not improbable, however, that the place may have formed part of a principality held by Chúrang Deo when invited to ascend the throne of Orissa, which thereby became annexed, temporarily to the latter Raj; and claims and political relations arising out of the possession of it, may have been one cause of the frequent expeditions south of the Godaveri and the interference in the affairs of Telingana and the Carnatic, which we shall find to be henceforwards exercised by the Ganga Vansa Rajas.

As a specimen of the morals of the Court of Orissa in this age it should be mentioned, that Raja Gangeswara Deo committed incest with his own

daughter, to expiate which offence he dug a superb tank by the advice of the brahmins, called the Kousala Ganj, which is still pointed out between Khúrda and Pipley.

After two short and unimportant reigns, Raja Anang Bhím Deo, one of the most illustrious of the Princes of the Ganga Vansa line, ascended the Gajapati Sinhasan or throne of the Gajapatis, A. D. 1174. He resided during the early part of his reign in the Nour or palace called Choudwar at Jajepur, but was induced by some omen to build a magnificent palace on the site of Fort Barabatti, adjoining the town of Cuttack, where he afterwards held his Court chiefly. The construction of the present castle of that name should in all probability be referred to this period, though a later date is generally assigned to it. Raja Anang Bhím Deo may be called the Firoz Shah of the age and country, from the number and variety of public works executed by his orders for the benefit or ornament of his dominions. Having unfortunately incurred the guilt of killing a brahmin, motives of superstition prompted him to construct numerous temples as an expiation for his offence, whilst the suggestions of a noble and princely spirit urged him to a large expenditure on works of more direct public utility, as tanks, wells, and bridges. He is said to have built sixty stone dewals or pagodas, ten bridges, forty wells, one hundred and fifty-two ghats, and to have founded four hundred and fifty sasans or villages, containing colonies of brahmins, besides excavating a crore of tanks. He more especially filled the whole khetr of Jagannáth with sacred edifices, and the great temple was erected by his orders under the superintendence of Paramahans Bajpoi, at an expence of about thirty or forty lacs. The date of its completion was A. D. 1196. He at the same time enlarged considerably the establishment, added fifteen brahmin and fifteen súdra Shewaks or officiating priests, and gave fresh splendour to the worship of the deity of the place, by the institution of numerous bhogs and jatras (feasts and festivals.)

The most remarkable feature of Raja Anang Bhím Deo's reign, however,

is the measurement undertaken by him of the whole of the land comprized within his dominions, and the arrangements connected with that procedure. We are informed that under the superintendence of the principal ministers Damodar Bar Panda and Isan Patnaik, the whole country from the Ganges (Hoogley) to the Godaveri, and from the sea to the frontier of Sonepur, was measured out with the rods called Nal and *Padkeh.* The results were as follows, viz.

Total contents, (each batti containing 20 bigas,) - -	*Battis* 62,28,000
Deduct, Ground occupied by sites of hills, beds of nullahs, towns, &c. and land irreclaimably waste, - - - - - -	14,80,000
Remains,	47,48,000

Of this quantity 24,30,000 battis* are stated to have been reserved as the Raja's *Nijkarch,* khaliseh or royal domain, and the remainder 23,18,000 battis were assigned for the support of his chiefs, armies, officers of state, brahmins, elephants, &c.

Connected with and illustrative of the above proceeding, a highly curious speech of the Raja's is given in the annals of the Púri temple, of which I shall here present an abstract translation. Having been warned in a dream by Parameswara (Sri Jagannáth,) that it was proper he should offer his devotions at Púri, the Raja proceeded to that place in the 12th year of his reign. After performing the usual worship with great pomp and solemnity, he collected about him the princes of his family, vassal lords, and chief officers of state, and held the following discourse: "Hear, Oh Chiefs and Princes, the arrangements which I have established for the ma-

* The amount of the estimate in square yards or miles, must depend on the size of the biga, which is not indicated. If we assume it at the present average of the province, the dominions of the Gajapatis included at that period more than 40,000 square miles.

nagement of my empire, the expenses of state, the pay of my armies and religious establishments, and the support of the royal treasury, and attend to the counsel which I give you. It is known to you that the Rajas of the Kesarí line ruled from the Kans Bans river on the north, to the Rassikoilah south, and from the sea on the east to the Dandpat of Bhímnagar* west, from which tract of country they derived a revenue of fifteen lacs of *marhs* of gold. By the grace of Sri Jagannáth, the Princes of the Ganga Vansa have, after subduing the khetris and bhuniyas (Zemindars), added to the Raj the following extent of country, viz. on the north that lying between the Kans Bans and the Dataï Borhí river, South the country from the Rassikoilah down to the Dandpat of Rajmandri, and west to the confines of Boad (Bodh) Sonepur, from which an increase of revenue of twenty lacs has been obtained; my total gross revenues therefore are thirty-five lacs of *marhs* of gold. Out of this amount I have assigned stated sums for the payment of the Sawants, (Commanders,) Mahawats, and Rawats, (chiefs of horses and elephants), priests, brahmins, and the worship of the deity. For the maintenance of the Paiks, Shewaks, (vassals or officers) and other servants of the state, lands have been duly set apart. Oh Princes and Chiefs, respect my arrangements, and beware that you never resume the above grants and allowances, lest you become liable to the penalty denounced in the shastras against those who take back what has been given. Above all in the management of the country under your charge, be just and merciful to the ryots, and collect revenue from them according to the fixed and established rate. As I have by my own good fortune and exertions accumulated a large treasure, viz. forty lacs of marhs of gold taken from the countries of the conquered bhuniyas, and jewels to the value of seven lacs eighty-eight thousand marhs, it is now my intention to devote a portion to the service of Jagannáth, by building a new temple one hundred cubits high, and bestowing a quantity of ornaments and utensils. Let me hear your opinions on this point." The ministers and

* Now Denkhanal.

courtiers all replied that so good a work could not too soon be taken in hand, and that after the sagacity and prudence displayed by his majesty, any advice on their parts must be superfluous. An officer named Paramahans Bajpoi was therefore directed to take the work in hand forthwith, and twelve lacs and fifty thousand marhs of gold with jewels to the value of 2,50,000 were set apart for the purpose.

The marh of gold is stated to be equivalent to five mashas weight, a valuation which would raise the amount of the revenues of Orissa according to the above statement, far beyond what we can believe them ever to have stood at, even allowing, as offered in explanation, that the gold of that age was very impure, and that the statement includes the gross rents of the whole of the lands of the country, both the royal domains and those now held by the hill Zemindars and Poligars. It appears unaccountable too, why the sum total of the revenues should be stated in gold, when we know that cowris always formed the principal currency of the district. As I am unable to furnish any satisfactory elucidation of these points, I must leave the statement as it stands, content with having presented a faithful translation.

On the above occasion, likewise, a new coin and seal were struck by the Raja's orders, with the titles which are used to this day by the Khúrda Rajas, who claim to represent the majesty of this once powerful race. They run thus, "Vira Srí Gajapati, Gauréswara navakotíkernátotkalavergéswarádhiraï, Bhúta bhairava déva, Sádhusásanotkarana, Ráwat Raï, Atula balaprakarmasangráma Sahasra báhu, Kshetriya Kuladhúmrakétu," &c. "The illustrious Hero, the Gajapati (Lord of Elephants,) Sovereign of Gaúra (Bengal,) Supreme Monarch over the rulers of the tribes of Utkala, Kernáta, and the nine forts, a divinity terrible as Bhairava to the wicked, the protector of the grants enjoyed by the pious; king of kings: like the lord of a thousand arms in the field of battle by his unequalled might, and a comet (or portent) to the martial race."

Many of the titles of persons of distinction, now in general use in the province, were introduced at that period, as Sawant, Mangraj, Bar Jenna, Patsahani, Bar Panda, &c. and we have imperfect hints given of offices, dignities, and institutions founded by Raja Anang Bhím Deo, as for instance the sixteen Sawants or great Lords of Orissa, the seventy-two Nijogs or servants, the thirty-six departments of state, &c. which excite additional regret at the slender and imperfect notices left to us of a reign, so pregnant with important changes and arrangements, whose influence may even yet be traced.

It is said that the Raja could muster 3,00,000 Paiks, but his army ordinarily consisted of 50,000 foot and 10,000 horse, with 2,500 elephants, at the head of which he was actively employed in chastising the turbulent and maintaining his authority, throughout the widely extended range of his dominions.

His son Rájeswara Deo reigned thirty-five years and was succeeded A. D. 1236 by Raja Narsinh Deo, surnamed Langora, a prince of great celebrity in the annals of Orissa, as well as in its legends and romances. His great personal strength, and skill in athletic exercises, seem to have invested him with a sort of supernatural character in the eyes of his subjects, and popular tradition has exaggerated some peculiarity in his figure or dress, into the fable of his being provided with a tail, whence is derived the epithet Langora. He is said to have been of a very martial turn, and to have waged a long war to the southward.

It was this Raja who built the famous temple of the sun at Kanárak, called by the Europeans the Black Pagoda "thereby, observes the Author of the Ayin Acberi, erecting for himself a lasting monument of fame." The work was executed chiefly under the superintendence of the minister Shibai Santra, and is stated to have been completed in the year of the Sacábda 1200, answering to 1277 A. D.

Major Stewart, in his history of Bengal, places an invasion of Orissa by the Musselmans of Bengal during this reign, that is, A. D. 1243. The Chronicles of the country contain no mention of such an event. I have not Major Stewart's authorities at hand to refer to, but strongly suspect that he has been led into an error by mistaking some word resembling Jajipur, for Jajipur in Orissa. He expresses himself thus, "In the year "641 (A. D. 1243) the Raja of Jagepur (Orissa) having given some cause "of offence, Toghan khan marched to Ketasun on the frontier of Jagepur "where he found the army of the Raja had thrown up intrenchments to op-"pose him." In a battle which ensued, the invaders were defeated, and the Hindus elated with their victory pursued them and ventured even to lay siege to Gour, but assistance arriving they retired. Now, in the first place, Jajipur was never a separate principality as here described, and there is no such place in Orissa as Ketasun. Ferishteh is altogether silent on the subject in his history of Bengal, but in his general history he ascribes the siege of Gour, in the very year in question, to a party of Mogul Tartars who had invaded Bengal by way of Chitta, Thibet, &c. Dow's mistake of a similar nature is scarcely worth noticing. He makes Sultan Balin pursue the rebel Toghral into Jajnagar (A. D. 1239), which he calls *Orissa*, whereas it is evident from the mention of Sunargaon, as lying on the road, that Jajnagar is some place beyond the Ganges.

After Raja Langora Narsinh Deo, five other princes named Narsinh (Nara Sinha) and six with the title of Bhánu, whom some describe as a separate family called Súraj-bansi (Surya Vansa), ruled over Orissa, until A. D. 1451. Their reigns are for the most part undistinguished by events of importance, but they have left some public works which coupled with other monuments of the Ganga Vansa Rajas, give a favorable impression of the public spirit and munificence of that race. Amongst these the fine bridge at the entrance of Púri called the Athara Naleh, said to have been built A. D. 1300, by Raja Kabir Narsinh Deo, is the most worthy of notice. A dreadful scarcity is recorded to have happened early in the 14th cen-

tury, when paddy rose to the (then) enormous price of 120 kahans of cowris per bharan—about three times its present *average* rate calculated in the same currency, but nearly sixty times the ordinary selling price of that age, if an account in my possession is to be credited, which states, that under the Bhanús, rice in the husk sold for two kahans per bharan, clean rice at ten cowris per ser, and cotton one pan ten gandas per ser.

The last of the Rajas surnamed Bhanu, being childless, he adopted as his son and successor a youth, named Kapila or Kapil Santra, of the Súraj-bansi tribe of Rajputs. The boy became afterwards a prince of high renown under the title of Kapil Indra Deo, and the Native Chroniclers have not failed therefore to embellish the history of his early life, with flattering fictions and stories of supernatural occurrences, prophetic of his future rise and greatness. It is said, that when a child, he gained his livelihood by tending the cows of a brahmin. One day his master found him fast asleep on the ground at mid-day, and a huge snake standing erect near him, with its hood spread out and held in such a manner, as to shelter him from the fierce rays of the meridian sun. This indication satisfied the brahmin that he was destined to become something great. Shortly after, the Raja, whilst passing one day to the temple, took notice of him, enquired his name, and being struck with his answers and appearance, finding moreover that he was by caste and descent a ráwat or leader of the Súraj-bansi Rajputs, he attached him to the royal household, where he speedily became a favorite. He was soon directed by Mahadeo in a dream to adopt him as his son and successor. The lad was now called Kapil Bhowarbar, and rose rapidly through several offices to the post of Pater or Prime Minister. The Moguls having come into the country from the north with a large army to demand tribute, the Raja feeling himself unable to cope with them in the field, sent his favorite to negociate a treaty of peace. He was detained as a hostage for the payment of the sum agreed

upon, but was well treated by the King or Nawab, and on the death of his patron soon after, was allowed to return to Orissa, when he assumed the government, A. D. 1451, under the title of Kapil Indra Deo. His reign is described to have been one continued series of wars, sieges, and expeditions. He visited in person every quarter of his widely extended dominions, but was occupied chiefly to the southward, and resided a good deal at Kimedy and Rajamandry. He also visited the city of Vijianagara (Bidyanagar) and founded there several Sasans, more especially one called Damoderpur Sasan. The Raja afterwards pursued his conquests as far down as Rama's bridge, which the natives call Set Band Rameswara. The subjugation of a fort called Kondajoi or Kondjuri, perhaps Condapilly, and his proceedings there, are much spoken of. He is said to have deposed one Raja, and set up another called Narsinh Rai. Amongst his conquests, places called Maligunda and Malka (Malanca) are likewise mentioned. The particulars of the Raja's wars and expeditions in that distant quarter are, however, so loosely and indistinctly narrated, that it is impossible to make any thing satisfactory out of the account. He died near Condapilly, on the banks of the Kistna, after a busy and distinguished reign of twenty-seven years. The period of his administration was farther remarkable for the occurrence of two dreadful famines which swept off vast numbers of the human race. The price of paddy again rose during them to 125 kahans per bharan.

The chasms and omissions above noticed in the native annals of Orissa, are curiously enough supplied in part by Ferishteh's history of the Bahmini Sovereigns of Kalberga. Up to this period the Musselman kings of the Deccan, engaged in perpetual contests with the ousted Rais of Telingana and the Carnatic, had possessed neither leisure nor inclination to interfere with the affairs of Orissa. The two powers seem first to have come in contact during Kapil Indra Deo's reign; and if the Musselman accounts are correct, disputes between them originated in the aggressions of the Raja of Orissa.

Ferishteh relates, that in the time of Humayun Shah Bahmini, about A. D. 1457, the Telingahs prevailed on the Rajas of Orissa and Uria to afford them assistance against the Mohammedans, who sent a large army to their aid, with many war elephants. The confederates completely defeated the armies of Islam, and pursued them from the field of battle for many miles. Under Nizam Shah, son of the above, the Rai of Orissa in conjunction with the powerful Zemindars or Khetris (Poligars) of Telingana, again invaded the territories of the Deckany sovereigns by way of Rajamandry and plundered as far as *Kolas*.* The Rai of Orissa is said to have advanced in great state and splendour, "*ba shouket tamami*," with the declared intention of conquering the whole of Telingana from the Mussulmans, and compelling them to pay tribute. When he had arrived however within ten miles of the Mohammedan capital Ahmedabad (Beder), the ministers taking courage sent him a message of defiance saying that "their king had long in-"tended to subjugate Orissa and *Jehannagar* and render it tributary, but "the idea of the distance of that country had hitherto deterred him from the "undertaking: however as the Raja had now come so far to throw himself "into the jaws of destruction, much trouble would be saved to the victorious "armies of Islam." This bravado was followed up by a spirited sally of Patan horse, which cooled a little the ardour of the Hindus, and induced them to fall back. They were finally glad to purchase a secure retreat to their own frontier, by paying down a sum of five lacs of tankas.

Ferishteh goes on to state, that in the year 1471 A. D. the Rai of Uria called Himber, complained to King Mohammed Shah that he had been driven from his possessions by an usurper who was supported from Orissa, and offered on condition of obtaining effectual assistance for the recovery of his rights, to become tributary to the Musselman government, and to cede certain forts. It is not easy to satisfy one's self what is meant by this word

* The boldness and enterprize of the Orissan monarchs in those days, may surprize us when we consider the situation of Kolas in the heart of central India, beyond Kalberga and Beder.

Úria, which Ferishteh uses sometimes as the name of a person, and sometimes as that of a district, but from the whole context there seems reason to think that the author intends to designate by the term, the country between Rajamandry and Condapilly, &c. held probably at that time as a fief or dependency of the Orissan monarchy.

The Bahmini king, who had always wished to obtain a footing on the Godaveri, agreed to Himber's proposal, marched an army into Uria, defeated the usurper Mangal Rai, and restored the principality to his ally, taking for his own share the forts of Rajamandry and Condapilly.

After sometime Rai Úria seems to have repented of his connection with the Mohammedans, and to have become desirous of returning to his old allegiance. One of those destructive famines noticed in my accounts of Raja Kapil Indra Deo's reign, having spread general ruin and consternation throughout the Deccan, the conjuncture appeared to him favorable for making an effort to throw off the Musselman yoke, and he accordingly dispatched a message to the Rai of Orissa (which is fully detailed by Ferishteh) saying that "if he wished to recover his *hereditary dominions* in Telingana, now was the time." The Raja, on receiving this invitation, collected together an army of 10,000 foot and 8,000 horse, and summoning all his tributary chiefs to attend him, proceeded into Telingana without delay. Mohammed Shah hastened to oppose the combined forces of Orissa and Úria, and soon compelled the Rais to retreat across the lake of Rajamandry. He then, says Ferishteh, resolved to punish the idolater for his insolence and aggression, and taking with him a chosen body of 20,000 men, made a dash into Orissa, and penetrated as far as the capital, plundering and laying waste the country on all sides. The Raja unable to withstand the fury of the storm which he had so rashly raised, fled before the invaders, and was soon obliged to sue humbly for peace, which was granted only on condition of his paying down a large sum of gold and silver, and surrendering twenty-five celebrated elephants which he valued next his life. The Musselman prince

then retired, with the same degree of rapidity as he had advanced, to Condapilly, where he humbled his other opponent Rai Uria.

This inroad, which supposing the chronology of the two histories to be correct, must have happened (if at all) towards the close of Raja Kapil Indra Deo's reign, is not noticed in the meagre imperfect sketch of the events of that period, given in the Orissan annals. They make their Raja return however from the Deccan to Pursottem Chatter, about the date in question, when he consults the god as to which of his seven sons, all distinguished for their princely qualities and accomplishments, he should appoint his successor in the Raj. He was instructed to elect Pursottem Rai, though the youngest and born of a concubine. The choice was justified by his superior merit, and as the will of Sri Jeo at all events could not be disputed, the Raja named Pursottem Rai his successor, and took the favored youth with him on his last expedition to the banks of the Kistna, where he died as before stated A. D. 1478.

The Raja elect, having been acknowledged by the army on the Kistna as their sovereign, under the title of Pursottem Deo, returned with what speed he could to Cuttack, where his presence was necessary to counteract the intrigues and opposition of his six brothers, all indignant at their supercession. Their enmity and machinations long disturbed the peace of his Court, but he at last succeeded in expelling them, and they then retired to various quarters, where they built forts and established principalities for themselves.

The reign of Raja Pursottem Deo is rendered memorable by the most striking exploit recorded in the annals of Orissa, viz. the expedition to and conquest of Conjeveram. The circumstances of that transaction deserve to be rescued from oblivion, as well for the curious picture which they afford of the manners and opinions of the age and nation, as from their connection with an historical incident of some importance. The

fullest account of the expedition is to be found in the poem before noticed, called the Kanjikaveri Pot'hi, though as the author has had recourse to the embellishment of a regular epic machinery, the narrative is encumbered by fictitious characters and incidents. It is also much dwelt upon in all the Native histories, which agree in the main points of the relation, with some discrepancies as to the details.

The story runs nearly as follows: "In the country of Dakhin Kanouj Kernát Sásan, there lived a powerful Raja who had a vast fortress and palace built of a fine black stone, called Kanjinagar or Kanjikaveri (Conjeveram) and a daughter so beauteous and accomplished, that she was surnamed Pudmavati or Padmini.* The fame of her charms having reached to the ears of Mahárája Pursottem Deo, he became anxious to espouse her, and sent a messenger accordingly to the Chief of Conjeveram to solicit the hand of his fair daughter. That Raja was well pleased with the prospect of having for his son-in-law so great and powerful a prince as the Gajapati of Orissa, but considered it advisable to make some enquiries regarding the customs and manners of that Court, before consenting to the alliance. He soon found that the Mahárájas were in the habit of performing the duties of a sweeper (Chandal) before the image of Jagannáth, on its being brought forth from the temple annually at the Rat'h Játra. Now the Kanjinagar Raja was a devoted and exclusive worshipper of Sri Ganesh (Ganesa), and had very little respect for Sri Jeo, the divinity of Orissa; and conceiving the above humiliation to be quite unworthy of, and indeed utterly disgraceful to a Khetri of such high rank, he declined the alliance in consequence. The Gajapati monarch became very wroth at the refusal, and swore, that to revenge the slight cast on him, he would obtain the damsel by force and marry her to a real sweeper. He accordingly marched with a large army to attack Conjeveram, but was defeated

* This was the name of a Princess, whose amours with Khosru Perviz, are celebrated in several Indian and Persian Romances, and is in Sanscrit indeed the general name of a particular class of beauties.

and obliged to retire. Overwhelmed with shame and confusion, he now threw himself at the feet of Sri Jeo, and earnestly supplicated his interference to avenge the insult offered to the deity himself in the person of his faithful worshipper. The god promised assistance, says the author of the poem, directed him to assemble another army, and assured him that he would this time take the command of the expedition against Conjeveram in person. When the Raja had arrived, during the progress of his march, at the site of the village now called Manikpatam, he began to grow anxious for some visible indication of the presence of the deity. In the midst of his cogitations on the subject, a milkmaid or gwalin named Manika, came up and displayed a ring which she said had been entrusted to her, to present to the monarch of Orissa, by two handsome Cavaliers, mounted the one on a black, and the other on a white horse, who had just passed on to the southward. She also related some particulars of a conversation* with them which satisfied the Raja that the promise of assistance would be fulfilled, and that these horsemen were no other than the brothers Sri Jeo (Krishna) and Baldeo (Baladeva.) Full of joy and gratitude, he directed the village to be in future called, after his fair informant, Manikpatana, and marched onwards to the Deccan secure of success. On the other hand the chief of Conjeveram, alarmed at the second advance of the Gajapati in great force, appealed for aid to his protecting deity Ganesh, who candidly told him that he had little chance against Jagannáth, but would do his best. The siege was now opened and many obstinate and bloody battles were fought under the walls of the fort. The gods Sri Jeo and Ganesh, espousing warmly the cause of their respective votaries, perform many miracles and mix personally in the engagements, much in the style of the Homeric deities before the walls of Troy ; but the latter is always worsted. In reality, after a long struggle, Conjeveram fell before the armies of Orissa. The Raja escaped, but his beautiful daughter was

* This interview is described at great length in the poem, and the amorous impassioned turn which the dialogue takes between Sri Jeo and the milkmaid, is esteemed one of its chief beauties.

captured and conducted in triumph to Púri. A famous image of Gopal, called the Satbadi (Satya Vadin) Thakúr, that is, the "*truth-speaking god*," was brought off at the same time and set up in a temple ten miles north of Pursottem, where it may still be seen, a monument of the Conjeveram expedition.

I suspect that the tradition mentioned by Orme, vol. ii. book viii. confounds the conquest of Conjeveram above related, with some former expedition into the Carnatic of the more ancient Rajas of Orissa. "The tra-
"dition of these countries says, that many centuries before Mahommedan-
"ism, a king of Jagannáth, in Orissa, marched to the south with a great
"army, which subdued not only these provinces, but, crossing the Kistna,
"conquered in the Carnatic, as far as Conjeveram: these conquests he dis-
"tributed in many portions to his relations, officers, and menial servants,
"from whom several of the present northern polygars pretend to be line-
"ally descended, and to govern at this very time the very districts which
"were then given to their ancestor. All who claim this genealogy, esteem
"themselves the highest blood of native Indians next to the brahmins, equal
"to the Rajputs, and support this pre-eminence by the haughtiest obser-
"vances, insomuch that the breath of a different religion, and even of the
"meaner Indians, requires ablution," &c. &c.

Conformably with his oath, Raja Pursottem Deo made over the fair Padmavati or Padmini to his chief minister, desiring him to wed her to a sweeper. Both the minister, however, and all the people of Púri commiserated her misfortunes, and at the next Rath Jatra, when the Maharaja began to perform his office of *Chandal* (sweeper), the individual entrusted with charge of the lady brought her forth and presented her to him, saying, "You ordered me to give the Princess to a sweeper; *you* are the sweeper upon whom I bestow her." Moved by the intercession of his subjects, the Raja at last consented to marry Padmavati, and carried her to the palace at Cuttack. The end of this lady's history is as romantic as the preceding por-

tion of it. She is said to have conceived and brought forth a son by Mahadeo, shortly after which she disappeared. All the circumstances were explained to the husband in a dream, who acknowledged gratefully the honor conferred on him, and declared the child thus mysteriously born his successor in the Raj.

Pursottem Deo died after a reign of twenty-five years, and was succeeded by Pertab Janamuni, the son of Padmavati, under the title of Pertab Rúdra Deo, A. D. 1503. The wisdom and learning of this prince soon became the theme and admiration of the whole country. He had studied deeply all the shasters, was very fond of disputing and conversing on points of theology, and introduced many curious constructions of his own, and doctrines which were altogether new. He was withal devout, and built many temples. His skill in the arts of war and civil government, were eminent; in short he was equally celebrated as an able, learned, warlike and religious prince. A very curious anecdote is related of his conduct, which seems to shew that the followers of Buddha continued to form a sect of importance in this part of India until the beginning of the sixteenth century.* It is said that a serious robbery happened in the Raja's palace, and that he being anxious to discover the perpetrators, assembled together all the wise men, both of the Bauddhist and Brahminical persuasion, to obtain their assistance in prosecuting an investigation. The brahmins could tell nothing, but the followers of Buddha, through their knowledge of the occult art, were enabled to point out both the offender and the place where the stolen property was concealed. The Raja was induced by this incident to form so high an opinion of the learning and skill of the Bauddhists, that he became for some time a warm supporter of that sect. His Rani

* As this is contrary to received opinions, to the inferences warranted by the works of Mádhavácharya in the 13th century and the statement of Abulfazl in the 16th, it seems likely that the original authorities have confounded, as is very commonly the case, the Bauddhas and Jains, and that the latter are here intended.—*Note by the Secretary.*

on the other hand espoused zealously the cause of the brahmins. It was at last determined to make another formal trial of their relative skill as men of science, or rather magicians. Accordingly a snake was secretly put into an earthen jar, the mouth of which being covered up, the vessel was produced in a great assembly at the palace. Both parties were then asked what the jar contained. The brahmins answered, "it contains only earth," and sure enough when opened it was found to contain nothing but earth. This specimen of skill entirely changed the Raja's opinions, and he now became as violent against the Bauddhists as he had been before prejudiced in their favour—so much so that he not only withdrew his protection and countenance, but violently expelled the whole sect from his dominions, and destroyed all their books except the pot'his called the Amer Singh and Bír Singh (Amara Sinha and Vira Sinha). It is added that about this time Chytunya or Chytan Mahaprabhu came from Naddia in Bengal to visit the temple of Jagannáth, and that he performed miracles before the Raja. The key to the whole story is probably to be found in the visit of this celebrated Vyshnavite reformer or sectary, who doubtless had some share in creating the hostile disposition of Raja Pertab Rúdra Deo, towards the followers of the heretical Budha.

Another of those famines which have so often afflicted India, occurred early in this century in Orissa. The Raja who could find leisure for schemes of conquest and ambition amidst his religious enquiries and controversies, marched with his army down to Setu Band Rámeswara, reduced several forts, and took the famous city of Vijayanagara. The Mohammedans of the Deccan also gave abundant occupation to his arms on the southern frontier of the Raj, and whilst he was occupied in repelling or provoking their attacks, the Afghans from Bengal made an inroad into the province in great force. They advanced as far as Cuttack, and pitched their camp in the neighbourhood of the city, when the Governor Anant Singhar finding himself unable to oppose any effectual resistance, took refuge in the strong fortress of Sárangerh, south of the Katjúri. After satiating themselves

with the plunder of the capital, they proceeded towards Púri where they committed dreadful devastations; but the grand object of their search, the Idol or Deo of Orissa, had been removed out of their reach, the priests having taken the precaution, so soon as they heard of the approach of the invaders, to carry off Sri Jeo and the other images in boats across the Chilka in order to conceal them amongst the hills. Raja Pertab Rúdra Deo on receiving intelligence of these disastrous occurrences, hastened back from the Deccan, and performing a journey of months in a few days, he came up with the invading army before they had left the khetr, gave them battle, and destroyed a great number of the Mlecchas (Foreigners and Barbarians). He was however himself so much crippled by the contest, that he was happy to conclude a peace nearly on the enemy's terms, when they retired and left the province to itself.

This Prince died A. D. 1524, having reigned twenty-one years. With the three ab[illegible]able reigns, terminate all the glories of the Ganga Vansa dynasty, and the royal house of Orissa. The race itself became extinct soon after the demise of Raja Pertab Rúdra Deo, and the independence of the country was not destined long to survive. Pressed at both extremities by the vigour and enterprize of the Mohammedan governments of Bengal and Telingana, now in the full maturity of their strength, the downfall of the Orissan monarchy was further hastened by intestine commotions, disunion amongst the chiefs, and a series of bloody and destructive contests for the supreme dignity.

Pertab Rúdra Deo left thirty-two sons. The eldest of these reigned about five years, when he was murdered by the powerful minister Govind Bidyadhar. Another son succeeded, who was murdered at the expiration of a year. The minister then barbarously put to death the whole of the remaining thirty princes of the royal house, by the hands of his own son Madhu Srichander, and having destroyed several other persons of eminence, he thus literally waded up to his neck in blood to the throne, which

he ascended A. D. 1533 under the title of Raja Govind Deo. Two remarkable personages became first generally known during his administration, Mukund Harichandan, the Telinga, who received the government of the town of Cuttack, and Danaye or Danardan Bidyadhar, who, was appointed Prime Minister. The former afterwards became Raja of the country, and was the last of its independent sovereigns; the latter, though not himself a king, was the parent of kings—in other words, he was the ancestor of the third and titular branch of the Gajapatis of Orissa, known in after ages as the Rajas of Khúrda.

The presence of the Raja being required in the Deccan, he resided for eight months at Malgunda or Maligonda with his minister. We may infer from Ferishteh, that the possession of Rajamundry and other places near the Godaveri was about this period much disputed between the Úria princes and the Musselman kings of the Deccan, both the Bahminis, and that branch of their successors who ruled at Golconda under the title of Kutteb Shahis. Ferishteh's account of the latter monarchs contains a passage relating to Orissa which I may here quote. He says, "Hindu "writers observe that there are three countries adjoining each other, the "climates of which resemble each other greatly, and possess much the same "peculiarities, viz. *Teling*, *Beng*, and *Oorek* (Orixa). Teling, is that pos-"sessed by the Kutteb Shahi sovereigns. Beng, is Bengala. Oorek lies be-"tween them. No Musselman prince has ever been able to conquer the "latter, but king Mohammed Kuli Kooteb attacked it and subdued ma-"ny parts. The *Hakim* of that quarter is called Bahabalinder (a common "title, it may be observed, of the feudal chiefs of Orissa, but not of the Ra-"jas);* he fled off to the remotest parts of his country."

The usurper's two nephews, Raghu Bhanj Chotra and Balanki Sri-

* May not this be the original of the Mohammedan Balharas, a term that has puzzled all orientalists. It need not be restricted to this province being a regular Sanscrit compound implying, The Indra (chief) of the mighty, or literally, strong-armed.—*Note by the Secretary.*

chandan, taking advantage of the opportunity afforded by his absence, formed a conspiracy against his authority; they murdered the head Percha of the temple at Púri, drove Mukund Harichandan from Cuttack, and gained possession of the capital. These occurrences obliged the Raja to return with a large part of his army, and a pitched battle took place between the parties, when the insurgents were defeated and pursued as far as the Ganges. Raja Govind Deo died on the banks of that river at the Das Aswamedh ghat, in the seventh year of his rule.

Pertab Chakra Deo was then placed on the throne by the minister Danaye Bidiadhur, who, after seeing his authority properly established, returned to the Deccan to look after matters in that quarter. Though a weak, oppressive, and tyrannical prince, who carried his excesses so far even as to distress brahmins, he was maintained in the government for about eight years by the influence and support of his minister, and then died suddenly in the temple itself.

There being no heir left of the Rajas of Orissa, a chief named Narsingh Jenna, distinguished for his bravery and conduct, stept into the vacant seat of government. Jealous of the influence of Danaye Bidiadhur, he procured his attendance from the Deccan, and then with the assistance of his rival Mukund Harichandan, threw him into chains and imprisonment at Cuttack. In the mean time Raghu Bhanj Chotra, having recovered from his former defeat, entered Orissa again at the head of a large force to assert his claims to the Raj. He was opposed by Mukund Harichandan, who took him prisoner after many bloody battles.

Narsingh Jenna was deposed at the end of the year, it does not appear by whom, and the reins of government then passed into the hands of the most undoubtedly powerful officer in the province, Mukund Harichandan, the Telinga, who ascended the throne of the Gajapatis, A. D. 1550, under the well known title of Telinga Mukund Deo.

All the native accounts concur in describing their last independent Raja as a man of courage and abilities. He has been honored with a notice in the work of the Jesuit Tieffenthaler, who extends our knowledge of his character by informing us that "the last king of the Orissans was called Mukund, who was very polite to strangers and had four hundred women." The early part of his reign was employed chiefly in constructing monuments of public utility or superstition, as temples, tanks, and brahminical sasans. Amongst other works of the kind, he founded a ghat and temple at the sacred spot called Tribeni, on the Hoogly, north of the town of that name which formed the extreme verge of his dominions, and whilst so occupied, frequent communications are said to have passed between him and the king of Delhi, or rather the officers of the emperor. Soliman Gúrzani, the Afghan king or governor of Bengal, having assembled an army to invade Orissa, the Raja built a strong fortress in some commanding situation, and for this time opposed his endeavours successfully. At last however came Kála Pahar General of the Bengal forces, the destined conqueror of Orissa, with his wonder-working kettle drum, at the sound of which the ears and feet of the idols would drop off for many coss all around. The Hindus say of this dreaded enemy of their images and superstition, that he was originally a brahmin, but lost caste through a contrivance of the princess of Gaura, who was smitten with the manly beauty of his person. He then married her, turned Musselman, and became a relentless persecutor of the adherents of the faith from which he had apostatized. Many dire omens preceded and announced his arrival in the province; amongst others a large stone fell from the summit of the great tower of the temple at Púri, and when he entered the precincts of the khetr, a general darkness overspread the four corners of the land. In short, Kálapahar invaded Orissa on the part of the king or governor of Bengal with an army of Afghan Cavalry, defeated and killed the Raja or drove him from the country, and finally overthrew the independent sovereignty of Orissa, A. D. 1558. Two titular princes were set up after the expulsion of Mukund Deo, who both fell into the hands of the conquerors

and were put to death by them. An anarchy of twenty-one years duration then ensued, during which the Afghan Mohammedans possessed the whole of the open country, and there was no Raja.

The several accounts which have been handed down of Kálapahar's invasion of Orissa, differ widely in the details, though the main facts are well known and established. The story told by the Musselman writers is that, Mukund Deo, apprehending the designs of the king or governor of Bengal, encamped with a large part of his army on the Ganges, but Kálapahar turning his position got a-head of him into Orissa, and began to plunder the country and attack the temples of the Hindus with relentless fury, before any force could be brought to check him. A battle at length took place at Jajipur in which the Raja lost his life. The Afghan chief then went on to Sambhelpur where he was killed by some of the Bhuyans. Others say that on his passing the great temple of the Ling Raj at Bhuvaneswara, a swarm of bees issued from the throne of the idol and stung him to death. The Púri Vynsavali makes the Raja to have been busy in Khúrda when the Afghan army suddenly advanced upon Cuttack, defeated the Governor Gopi Sáwant Sinhar, and plundered the palace and treasury, alarmed at which news, Mukund Deo fled out of the province not daring to oppose so powerful a force, and died shortly after in the king of Delhi's dominions. The relation in Gladwin's Bengal of the Raja building fort Barabati, when he heard of Kálapahar's approach, and going to sleep for many months according to custom, until roused by the alarming sound of the magic kettle drum, is a third version of the story which carries with it its own refutation. All the native writers however agree in speaking with horror of the cruel excesses committed by their Afghan conqueror, and the wide destruction of images and temples occasioned by his unrelenting persecution of the Hindu faith.

The adventures of the great idol form a curious episode in the history of

this important period. According to the Mandala Panji, when the priests at Púri saw the turn which matters were taking, they again for the third time in their annals, hurried away the helpless god in a covered cart, and buried him in a pit at Paríkúd, on the Chilka Lake. Kálapahar was not however to be defrauded of so rich a prize, and having traced out the place of concealment, he dug up Sri Jeo and carried him off on an elephant, as far as the Ganges, after breaking in pieces every image in the Khetr. He then collected a large pile of wood, and setting fire to it, threw the idol on the burning heap, but immediately all his limbs dropped off and he perished miserably. A bystander observed, "this is a punishment for the indignity offered to the Deo of Orissa," and snatching the image from the flames, threw it into the river. The whole proceeding had been watched by Besar Mainti, a faithful votary of Jagannáth, who followed the half burnt image as it floated down the stream, and at last when unperceived, managed to extract from it the sacred part (Brahm or spirit in the original), and brought it back secretly to Orissa, where it was carefully deposited in charge of the Khandait of Kujang.

It appears from Ferishteh, that the Afghans under Daood Khan, the son of Soloman Karsáni (or Gurzáni), were allowed to retain possession of Orissa for some time after the overthrow of the native government; but having drawn down upon themselves the vengeance of the Emperor Akber by their turbulence and violent proceedings, they were several times attacked, first by Monaim Khan and afterwards by Khan Jehan, who wrested their new acquisition from them about 1578 A. D. and annexed it to the rent roll of the empire. Ferishteh in this place calls the province Orissa, and Katak, Benares.

The Úria historians go on to relate, that, at the expiration of the twenty-one years of anarchy and interregnum, the ministers and principal men of the country beginning to recover from their depression and alarm, assembled together to consult about the affairs of the nation, and chose as

their chief a person named Ranai Raotra, son of the before mentioned minister Danaye Bidyadhar, whom they raised to the rank and dignity of Maharaja of Orissa, A. D. 1580, under the title of Ramchander Deo. With him begins the third and titular race of Sovereigns called the Bhoi Vansa, or Zemindari race. The election was confirmed by Sewai Jye Sinh, the general of the Emperor Akber, who came into the province about the time, with his army, to look after the Imperial interests. The sight of Bhuvaneswara, its numerous temples, the crowds of brahmins, and the sacred character of every thing in Utcala Desa, is said to have impressed him with feelings of so much reverence and admiration for the country, that he determined to interfere very little in its affairs, and retired shortly afterwards, leaving a large share of authority in the hands of its Native Princes. The town of Midnapore was at this time made the northern boundary of Orissa.

Raja Ramchander Deo's first care was to recover the sacred relics belonging to the old image of Jagannáth, which duty being accomplished with the assistance of their preserver Besar Mainti, the *Dáru Múrat*, or image made of the wood of the Ním tree, was fabricated according to the rules of the shaster, and again set up in the temple, on a propitious day, with much pomp and solemnity. The worship of Sri Jeo was now fully restored, all the feasts and endowments of the temple put on their old footing, and a number of sásans were founded in honor of the memorable event. It was disturbed again however almost immediately afterwards, by an invasion of Musselmans from Golconda, whose king or *Adipati*, as the Hindu writers call him, seems to have given the Raja a severe defeat.

In 1582 A. D. the celebrated Dewan of the empire, Raja Toder, or as the Urias call him Toral Mall, visited the province, to superintend the introduction of his settlement called the Taksim Jamma and Tankha Raqmi. He proceeded no further with it, apparently, than the three Sircars of Jelasore, Badrak, and Cuttack. All the account which is preserved

of that important and memorable transaction, is, that from the time of Toral Mall's visit to the province, the measurement by the Bareh Dasti Padika or rod of twelve spans, was introduced. He is said to have treated the Raja with much respect, and to have admired greatly the temple and image of Jagannáth, but his proceedings must have been fatal to the power and authority of the Gajapati prince, as he seems to have annexed nearly the whole of his domains to the imperial rent roll.

The Mogul arrangements for the management of the new Suba of Orissa, did not receive their final completion until A. D. 1592 or 999 Amli, when Raja Mán Sinh, the imperial Lieutenant in Bengal, came to assume charge of the administration. His expedition was prompted, partly by the view to expel the Afghans, who under Kattali Khan had again taken possession of a large part of the province, and committed every where the most frightful ravages and excesses, and partly to settle disputes which had arisen between Ramchander Deo the titular Raja, and the two sons of Telinga Mukund Deo, of whom the eldest was named Ramchander Rai, and the second Chaki or Chakowri Bhowerber. The fate of Kattali Khan and his Afghans, may be read in Major Stewart's history of Bengal. With respect to the native princes, Raja Mán Sinh finding that disputes ran high for possession of the Raj, and that both parties had powerful supporters amongst the Khandaits or Military Zemindars, it was judged expedient to make a division amongst them of the remnant left to the royal house of Orissa of the territories of their ancestors. Accordingly Khúrda, with Púrsottem Chetter, and certain Mehals, were assigned in Zemindari tenure, free of all tribute, to Ramchander Deo, with the title of Maha Raja, and the Musselman dignity of the commandership of three thousand five hundred. He was also allowed to exercise the chiefship or sovereignty over, and to collect tribute from, 129 of the killahs or jurisdictions of the Khetris of Orissa, including all the present Cuttack tributary Mehals south of the Mahánadi, and the Estates of Gúmser, Moherry, &c. reaching as far as the borders of Kimedy in Ganjam. Killah Ál, with

its dependencies, was assigned as a Zemindari to Ramchander, the eldest son of Telinga Mukund Deo, and Sarengerh on the same tenure to the second son Chakouri Bhowerber. Both were acknowledged as Rajas, and had the controul of a number of the Killahjat estates in different parts of the district. These arrangements have been already adverted to more in detail, in that portion of my paper which is designed to furnish some account of the land tenures and political institutions of Orissa.

The title of sovereignty has been always acknowledged by the general voice and feeling of the country, to vest in the Rajas of Khúrda, though disputed formerly by the other branches of the royal house who have now sunk into entire insignificance. The former received by far the largest and most valuable portion of the country, in Mán Sinh's allotment, and the cession of Púri alone was a sufficient acknowledgment of their superior claims. Down to the present moment, the Rajas of Khúrda are the sole fountain of honour in this district, and all deeds whatever drawn out in the *Úria* language, bear the date of the *Ank* or accession of the reigning prince of that house, and are prefaced with a recital of his titles, which run precisely in the style adopted many centuries ago by the great Raja Anang Bhim Deo.

Ramchander Deo enjoyed his station and dignities for twenty-nine years. He was an able and respectable prince, and his memory seems to be much venerated by the natives of the province. From his time, the field embraced by the Orissan annals, becomes greatly narrowed, though they still afford a vast deal of curious local information. The necessary limits of an essay of this kind confine me to an exhibition of 1st. A list of the names of the several Rajas and the duration of their reigns, and 2nd, a brief outline of such part of their history, as has any connection with the general affairs of the *Súbah* of Orissa. The materials for an historical account of the country, under this new denomination, are very scanty and imperfect. The slender information extant of the proceedings of the Mogul offi-

cers from the retirement of Raja Mán Sinh in A. D. 1604, to the dewanship of the famous Nuwab Jaffer Khan Nasirí (A. D. 1707 to 1725), has to be gleaned from a few scattered notices in Persian histories of Bengal and scarcely intelligible revenue accounts; though the century in question must be regarded as a most important period in the annals of the country, when we consider the deep and permanent traces impressed on the state of affairs, by the arrangements, institutions, offices, and official designations, introduced by the imperial government during that interval. Subsequent to the elevation of Jaffer Khan, we meet with tolerably full and detailed journals and records both of the Mohammedan and Marhatta administrations, composed in the Persian language.

List of Khúrda Rajas.

Ramchander Deo, succeeds - - - - - -	A. D. 1580
Pursottem Deo, - - - - - - - - - - - -	1609
Narsinh Deo, - - - - - - - - - - - - -	1630
Gangadhar Deo, - - - - - - - - - - - -	1655
Balbhadder Deo, - - - - - - - - - - -	1656
Mukund Deo, - - - - - - - - - - - - -	1664
Dirb Sinh Deo, - - - - - - - - - - - -	1692
Kishen or Harikishen Deo, - - - - - - - -	1715
Gopinath Deo, - - - - - - - - - - - -	1720
Ramchander Deo, - - - - - - - - - - -	1727
Bír Kishore Deo, - - - - - - - - - - -	1743
Dirb Sinh Deo, - - - - - - - - - - - -	1786
Mukund Deo, - - - - - - - - - - - - -	1798

The southern part of Orissa Proper must have suffered much from the constant wars, insurrections, and internal commotions, that prevailed during the early times of the Musselman government. The Moguls seem to have been actuated by peculiar rancour and ill will towards Jagannáth, and lost no opportunity of annoying and disturbing the Hindus in the per-

formance of their devotions at his temple. To say nothing of other fruitful sources of jealousy and animosity, this interference alone was sufficient to produce many bloody encounters between the two nations, in which success was often doubtful. On the whole however, the native Princes suffered the most severely, and gradually sank before the superior energy and civilization of the Moguls. The Rajas had at first established their residence at Pipley; afterwards they retired to Rathipur; and finally built their fort and palace in a naturally difficult part of Khúrda, where they were found settled in 1803. During these contests in and about Púri, the images so much venerated by the one party and abhorred by the other, were twice or thrice carried away across the Chilka Lake, and concealed amidst the hills, until the times appeared favorable for again setting them upon their thrones in the temple. This religious warfare was at last set at rest by the institution of the tax on pilgrims, which if we may credit the author of the work translated by Gladwin, under the title of History of Bengal, yielded to the Mogul government a revenue of nine lacs. Under such circumstances, religious antipathies however strong on the part of the ruling power, must have yielded gradually to considerations of self-interest.

The Afghans did not disappear from the field as disturbers of the peace f Cuttack, until 1611 A. D. when having again risen under Osman Khan the son of Kattali, they were defeated with great slaughter on the Subanrekha by Shuját Khan from Bengal, and compelled finally to submit. They then settled peaceably in many of the principal villages of the district, and their descendants at this day form no inconsiderable Musselman population, under the general denomination of Pathans.

On the side of Rajwára, the Rajas had to maintain many fierce contests with the Khetri chiefs or zemindars subordinate to them, who became turbulent and unruly in proportion as the power and consequence of the chief of their class declined. Frequently, no doubt, a spirit of aggrandizement urged the Rajas to become the aggressors. Of the operation of either one

or both causes of hostility, we may trace abundant proofs, in the dismemberment of many of the old Khandaitis recorded in the accounts of Raja Mán Sinh's settlement, which became afterwards annexed to Khúrda.

The state of the country is represented in no favorable light during the administration of the famous Jaffer Khan Nasirí, whose arrangements moreover could not have tended much to improve it. In Gladwin's history of Bengal it is mentioned that Jaffer Khan whilst Dewan, represented to the Court of Delhi, "the advantages that would accrue to the crown by transferring the Jagírs of the Mansabdars of Bengal to Orissa, where the lands are of less value, and the collections made with greater expense and difficulty." It is added that, the Emperor approving the scheme, assignments were granted upon Orissa, the *cultivation* of which province *had of late been very much neglected*, in lieu of the Bengal Jagírs.

The administration of Mohammed Taki Khan, the Naib, (1725 to 1735, A. D.) on the part of Shujâa ad Dín Mohammed, Nazim of the three provinces, is marked by a great reduction of the limits of the province of Orissa. In his time the remainder of the old Jelasore Sircar* lying between Tumlook, Midnapore, and the Subanreka, with the exception of a few small pergunnahs near the latter river, was annexed to Bengal, and the Nizam's government obtained possession either by force or intrigue of the entire country included between the estates called Tikally† Raghunáthpur, and the Chilka lake, thus greatly reducing the revenues and authority of the Rajas of Khúrda, whose controul had before extended on the hill side, from Gúmser to within forty miles of Cicacole. A war occurred between this governor, and the Raja Ramchander Deo of Khúrda, which was terminated after a long struggle by the capture of the latter and his imprisonment in Cuttack. Temporary possession was taken of Khúrda

* This sircar had been divided in Shah Jehan's reign into the four following subdivisions as already noticed, viz. Goalpareh, Maljhettia, Mazkúri, and Jelasir.

† Forty-three miles N. E. of Cicacole.

by the Musselmans, who established twenty-two thanehs from Banpur to Balwanta to repress the turbulent spirit of its rude inhabitants, but these were removed by order from Court, on the death of Ramchander, and the succession of Raja Bír Kishore Deo.

During Murshed Kuli Khan's government, the tranquillity of the country was disturbed by the wars of that person with the famous Aliverdi Khan, after his usurpation of the government of Bengal. Raja Bír Kishore Deo espoused the cause of the local governor, and by his assistance, enabled Baker Khan, the son-in-law of the latter, to continue the dispute for some time.

But the greatest of all their calamities was now impending over the unfortunate Orissans. After some alarming demonstrations in the year preceding, the Berar Marhattas suddenly made their appearance in the province, in Phalgun 1150 Amli, in large force under Bháskar Pundit, Ali Shah, and other sirdars, with the professed object of demanding the Chout. There being no force in the province adequate to oppose them, they swept the whole country up to the walls of fort Barabattí, plundering whatever they could lay their hands on without mercy,—and the same scenes were repeated the year following, by a still larger army under Ragoji Bhonsla himself, and the famous adventurer Habíb Ullah. Aliverdi Khan made astonishing efforts to relieve the province, as well as to protect the adjoining districts from these destructive inroads, but the people of Midnapore and Cuttack enjoyed little respite from the Marhatta incursions and depredations until 1157, when a temporary arrangement was patched up between the Nazim and the Bhonsla, by which the former agreed to pay twenty-four lacs (including arrears) as the Chout of the three provinces. The conditions of the treaty being very indifferently observed on the part of the Bengal government, a fresh army invaded Orissa in 1160, under the command of Raja Janoji Bhonsla and Mír Habíb Ullah, who in the same year, in their camp at Choudwar, near the Mahanadi,

A. D. 1745.

projected and arranged a partition of the province between themselves, for the maintenance of their respective armies. Its resources on this occasion were estimated at only ten lacs. The northern portion from Pattaspur to Barrunwa, yielding six lacs, was assigned for the support of the Afghan troops, and the southern from Barrunwa to Malúd, rated at four lacs, was to be held by the Marhattas. On the treacherous murder of Habíb Ullah Khan shortly afterwards in his camp at Garpedda, near Balasore, Raja Janoji became master of the whole province from Pergunnah Pattaspur to the Thaneh of Malúd. His arrangement was, to allot the whole of the lands yielding revenue, as Mukaseh, for the support of his army, one Mehal being made over to the management of each sirdar. Things remained in this miserable state till 1161, when a fresh treaty was entered into, between the Marhattas and Aliverdi Khan, at the instigation of the whole body of the Zemindars of Midnapore and neighbouring districts, who, worn out by the repeated incursions of the Berar Marhattas, offered to pay any sum, in addition to the Tashkhís Mokerreri or fixed revenue of Bengal, which might be agreed to as a composition for the Chout Sir Des Múkhí. Masalih ad Dín was in consequence dispatched by the Court of Moorshedabad to Nagpore, with full powers to treat, and the following arrangements were determined on, "The Chout of the three Subas was now settled at 12,00,000 annually. The Suba of Orissa from Pergunnah Pattaspur to Malúd to be managed by a Subadar appointed from Bengal, who should yearly pay the surplus revenue of that province, estimated at four lacs, to an agent of the Bhonsla stationed at Cuttack. The remaining eight lacs were to be made good from Moorshedabad, Patna, &c. by Húndis or Bills of Exchange. The Marhatta armies forthwith to evacuate the province." On the conclusion of the treaty, Raja Janoji quitted Orissa, Mohammed Masalih ad Dín received the appointment of Naib Subadar, and Sheo Bhat Santra, an eminent Gosain merchant, was named the agent for the Court of Berar to receive the four lacs from Cuttack, and to look after the annual remittance of the balance of the Chout from Moorshedabad.

Masalih ad Dín laboured honestly and zealously to discharge the obligations into which he had entered, and paid the four lacs for two years to the Nagpore agent, but at the end of that period he solicited permission to relinquish the government, stating forcibly his inability any longer to fulfil his engagements, owing to the declining resources of the country, and still more to the turbulent and unmanageable character of the Khandaits, or Military Zemindars of Orissa, who could be kept in no sort of subjection without the constant employment of a very large army in the field, the expense of maintaining which, engrossed the whole revenues. His statements so fully convinced his master of the impolicy of any longer retaining Cuttack, burthened with the condition of paying four lacs annually from its revenues, that a proposal was tendered to the Raja of Nagpore, to undertake the management of the country through officers of his own appointment, in lieu of the stipulated payment, which being agreed to, the Suba of Cuttack, fell from that date under the sole undisputed government of the Berar Marhattas, A. D. 1755-6.

The administration of the Marhattas in Cuttack, was, as in every other part of their foreign conquests, fatal to the welfare of the people and the prosperity of the country, and exhibits a picture of misrule, anarchy, weakness, rapacity, and violence combined, which makes one wonder how society can have been kept together under so calamitous a tyranny. All the head offices of the district, as those of Subadar, Dewan, and the Killadarship of fort Barabattí, were openly bought and sold at Nagpore. It frequently happened that appointments were given to two or three persons at the same time, and still oftener the individuals in charge refused to retire under various pretexts. The different claimants, assembling their followers, would fight the most obstinate battles, and lay waste the country with their dissensions, before the right to succeed was settled. Pressed by the urgent irregular demands of the Court of Nagpore for remittances, and by the necessity of reimbursing themselves for the expen-

ces incurred in obtaining office, the most ruinous shifts and expedients were perpetually resorted to, to wring a higher revenue from the lands, whilst their resources declined in proportion to the tyranny exercised over the cultivators. Notwithstanding that large military bodies were posted all over the district, the Marhattas were quite unable to retain the Khandaits and their paiks in any sort of order. Those of the sea shore and the hills, not only laid the whole of the pergunnahs bordering upon them under regular contribution, but frequently the Paiks of several small killahs, combining together, advanced into the heart of the district, and committed the most ruinous depredations up to the very walls of Cuttack. Every year regularly after the Dassera, the Marhatta armies took the field under the Subadar in person, and advanced into some part of the Rajwára, to chastise some insolence, or to enforce the demand for tribute. When successful, the most sanguinary punishments and destructive ravages were inflicted,—but they were frequently defeated, and their weakness exposed, by the Paiks of killahs which now scarcely retain a name. Besides, the continued marches and countermarches of a licentious disorderly Marhatta soldiery, in every direction across the province, were in themselves evils of no trifling magnitude. Matters improved a little towards the close of the Marhatta period, during the long administration of Raja Ram Pundit; but if the ryots were in a small degree better protected by his measures, he reduced, to the lowest stage of poverty and degradation, a powerful and important class, the hereditary Talúkdars (now Zemindars) of the Mogulbandi, who were ejected by him, very generally, from the management of their Talúks, and left with scarcely even the means of subsistence.

As it would be impossible to render interesting to the general reader, the never varying detail of oppression, mismanagement, and suffering displayed by the Marhatta annals, I shall content myself, in my account of this fourth stage of Orissan history, with a brief enumeration of the successive Subadars who obtained authority, as far as any can be made out amidst

the perpetual conflicts for power which disturbed the peace of the country, and with noticing a few events of general importance which mark that period.

The first and most energetic of the Marhatta Subadars, was Sheo Bhat Santia, who exercised a disputed and precarious authority for a period of about eight years from 1163 to 1171, and may be said to have been in full possession of the powers of government for about half that period. He made a settlement of the revenues of the province, nominally at 18,00,000 of Arcot Rupees, of which 14,00,000 were entered as regular land revenue (Bandobasti Mulk,) and the remaining 4,00,000 as imposts under various heads. During his administration, a farther dismemberment took place of the territories of the Maharajas of Khúrda. In 1167 Amli, Narain Deo, the famous Zemindar of Kimedy,* a descendant of the royal family of Orissa, who had before asserted his preferable title to the Khúrda Raj, invaded that district by way of Banpur, with the avowed intention of taking possession of it, and drove the reigning prince Bir Kishore Deo before him. Unable to resist his powerful rival, the latter was thrown upon the dangerous expedient of claiming the assistance of the Marhattas, which was granted on condition of the payment of a large sum, to defray all expenses, in return. The aid of the Subadar proved effectual in clearing Khúrda of the pretender's army, but the Raja being unable to discharge the money bargained for, he was obliged to mortgage or surrender temporarily for its liquidation, the best portion of his dominions, viz. the Mehâls, Limbai, Raheng, Pursottem Chatter, &c.—in short, the whole country lying between the Dya river, the lake and the sea, with the tribute of the fourteen Rajas or Khandaits of the hills, still subject to his controul. The Marhattas were allowed to appoint their own Amils, and having thus gained a footing in the

* Mr. Grant in his Political Essay in the Northern Sircars says of this person: "Kimedy, fifty miles N. E. by N. from the town of Cicacole, is the capital of another tributary but more accessible dependent principality vested in a Raja of the royal family of Orissa who actually bears the titular designation of that ancient house under the proper name of Gujipati Deo, through the refractory imprudence of Narain Deo, father of the present occupant, in opposing the Company's authority."

tracts in question, they never afterwards relinquished possession. The benefit of the acquisition seems doubtful, as the usurpation of Raheng, &c. involved them in a state of unceasing hostility with the Khúrda Rajas, and the claim to levy the tribute of Rajwára brought them yearly into disputes and battles with the hill chiefs, in which, to say nothing of the expenditure of blood and treasure, they were nearly as often worsted as they were successful.

At the end of 1171 Amli, Sheo Bhat was violently expelled from his government, by a powerful faction countenanced by the Court of Nagpore. Chimna Sáhu and Udi Púra Gosain then exercised the powers of government for a short time, until Bhawáni Kalüa Pundit arrived in the province, with the senned or appointment of Subadar. The Ex-Subadar was not however of a character to relinquish his authority, without an obstinate struggle. He formed a powerful party amongst the Paiks of the eastern Rajwára, and for a length of time, disturbed the administration of his successor by frequent contests and inroads. The Paiks of other killahs espoused the opposite side. Troops were poured in from all quarters to quell these ryots, and the frequent marches and countermarches of the armies of the government are credibly enough stated to have involved more serious evils to the whole of the fine Pergunnahs Hariharpur, Khandi, Jhanker, Deogaon, &c. than the disturbances they were sent to repress. Amidst all these troubles the excesses of the Kújeng, Kanka, and Rynto Paiks were ever conspicuous. The ferment excited amongst the Military Zemindars of Orissa and their adherents by these events, did not subside until many years afterwards. It does not appear how the career of their author and instigator finally terminated. Mr. La Motte gives the following brief comparative sketch of the character of the administrations of the rival Governors: "Sheo Bhut plundered only his neighbours, but Bhawáni Pundit committed depredations on his subjects and all parties alike."

Bhawáni Pundit was recalled about 1175 Amli, and Sambha Ji Ganesh

appointed his successor. The settlement made by him is remembered, with bitterness, for its severity and harshness. He imposed many new cesses on the ryots, and exercised unusual rigour in scrutinizing and resuming lands held in Jagír, or free of rent, as the ayma, milk, kharidgi, mouajib, dagrai, &c. Those holders who were permitted to remain in possession, were obliged to contribute to the necessities of the state, and were made over for a given number of years in Tenkhah or assignment to different detachments of troops.

After two years, a Mahájan, named Baba Jí Naik, received the appointment of Subadar, but his powers were disputed by the party in possession, and it was not till 1178 Amli, that he became firmly fixed in his seat. The district of Cuttack suffered grievously from the memorable famine, which desolated the lower provinces in 1769-70. Rice was not to be had for two sers per rupee, and many thousands of souls perished. To add to the general distress, an alarming mutiny broke out amongst the troops, which was not quelled for many months.

On the accession of Sabaji Bhonsla to the Mesned of Nagpore, Madhaji Hari was sent into Cuttack as governor. He threw his predecessor into confinement, and was occupied with arrangements for increasing the revenue of the country, when the accession of Madhaji Bhonsla occasioned a fresh change of administration. Baba Jí Naik once more received the senned of Subadari in 1182, and stepped from a jail to the highest rank in the province. After much intrigue and opposition however, the order for his appointment was recalled, and Madha Jí was allowed to remain in office. In 1183 another dreadful scarcity of grain was experienced in Cuttack. Rice was hardly to be purchased in the bazar of Cuttack at ten pans the katki ser. In the mofussil, paddy rose as high as twelve pans per gún—Kulti to 12-2 and Mandova 1-4. Its destructive effects are most strikingly evinced, by the recorded fact, that a remission of seven lacs was granted in the revenues of that year.

Raja Ram Pundit, who had for many years filled the office of Deputy to the local governor, and had taken a leading part in all the arrangements for the management of the interior, succeeded to the office of Subadar, about 1185 or 1186. His personal qualities and abilities were respectable, and, coupled with his extensive local knowledge, lent a character of dignity and stability to his administration, with which no preceding one had been invested. The chief measure ascribed to him, is that of setting aside all the hereditary Chowdris and (Vilaity) Canungos, in other words the Talúkdars of the Mogulbandi, and collecting the revenues through officers of his own appointing, either from the ryots direct, or through the agency of the head men of villages, where such existed. He was also the first governor who imposed a tribute on the Maharajas of Khúrda. Raja Bir Kishore Deo, after a long reign of forty-one years, fell into a state of furious insanity, and committed such frightful excesses, even to the extent of murdering four of his own children, that a general outcry was raised against him throughout the country. The Marhattas did not neglect so favorable an opportunity of interfering. They secured the Raja's person, threw him into confinement in fort Barabattí, and refused to acknowledge his grandson Dirb Sinh Deo as successor, until they had obliged him to agree to the payment of a yearly tribute of Sa. Rs. 10,000. The expense of collecting this, must have been far greater than its value, for the Raja would never pay until compelled by the presence of a military force, and so low had the character and efficiency of the Marhatta Infantry sunk, that the Paiks of Khúrda often presumed to measure their strength with them, even in these last days of the power of the Rajas of Orissa.

Chimna Ji Bapú's visit to Cuttack, with a large army in 1781, A. D. is described as intended to enforce the claims of the Berar government against Bengal for arrears of Chout. Having cantooned his force at Kakkar, opposite to Cuttack, he sent on Raja Ram Pundit with Bissembher Pundit Vakil to Calcutta, who is said to have negotiated a treaty with Mr. Hastings, by which the English government agreed to the payment of 27,00,000 Rs. on condition of all farther claims being relinquished.

On the retirement of Raja Ram Pundit in 1200 Amli, his son Sadasheo Rao was appointed Nazim, and after him Chimna Bala. Affairs however were managed chiefly by Inkaji Sákdeo, the Pher Nanís, and Bala Ji Kunwar, the commander of fort Barabatti, and principal military officer. In this state things were found in 1803, when the province was conquered by the English armies. The dominion of the Khurda Rajas was not finally extinguished till 1804, when a most unprovoked rising against the newly established English government, drew down upon Raja Mukund Deo the vengeance of the British power. He was driven from his fort, seized, sent a prisoner to Midnapore, and his remaining territory of Khurda was brought under the management of the British collectors. Since that period the proud but insignificant representatives of the Maharajas of Orissa, have been officially acknowledged only as private landholders; but the liberal policy of government has conferred on them a sufficient pension, and an office of authority connected with the temple, in the enjoyment of which they pass their days in tranquil and honorable retirement, within the sacred limits of Jagannáth Púri.

PART III.

Religion, Antiquities, Temples, and Civil Architecture.

UTCALA DESA which is believed or fabled to be itself so holy a region throughout its entire extent, contains four places of pilgrimage of peculiar sanctity called the Hara Khetr, the Vishnu or Pursottem Khetr, the Arka or Padma Khetr, and the Vijayí or Parvatí Khetr, within the limits of which will be found nearly all that is curious and interesting in the Religious Antiquities of the province.

Bhobaneser. The Hara khetr, sacred to Mahádeo under the titles of the Linga Raja Bhuvanéswara, and thence called by the vulgar Bhobanéser, contains several very ancient and remarkable monuments of the native princes of the country, and their system of religious belief.

At Balwanta, on the new road, sixteen miles from Cuttack, the attention of the traveller is attracted by a lofty massive tower of stone, rising from amidst the thickets which skirt the adjoining frontier of Khurda. A path leads through the woods towards this object of curiosity, and conducts, at the end of about six miles, to a gently swelling rocky elevation or Tangi formed of beds of the iron clay, on reaching which you find yourself, with astonishment, in the centre of a ruined city, consisting entirely of deserted and dismantled towers and temples sacred to the worship of Mahádeo, under the innumerable titles, which absurd legends or the fancy of his votaries have assigned to that deity. From amidst the whole, the great Pagoda of the Ling Raj, or Lord of the Lingam, lifts its singular form, eminently conspicuous both for size, loftiness, and the superior style of its architecture.

Bhobanéser was the site of a capital city founded by Raja Lalat Indra Kesari the third of the princes bearing that surname, who reigned from A. D. 617 to A. D. 660. If we are to judge of its extent and populousness, during the period that it formed the seat of government of the Rajas of the Kesari Vansa, from the almost countless multitude of temples which are crowded within the sacred limits of the Panj Kosi, we might pronounce it to have been, in the days of its splendour, one of the greatest cities which India ever saw. Standing near the chief Pagoda,* one cannot turn the eye, in any direction, without taking into the view upwards of forty

* Mr. Ward mentions it in his work on the Hindus under the name of Ekamrakanuna, "a place, he says, on the borders of Orissa, containing Six Thousand temples dedicated to Shiva." Ekamra or Ekamber is the name given to the surrounding woods.

BRITISH MUSEUM
NATURAL HISTORY

Great Pagoda at Bhobanesir in Cuttack and other adjoining Temples.

Copied by E. Billon and Printed at the A.L. Press from an Original Drawing by A. Stirling Esq.r for the Asiatic Researches.

or fifty of these stone towers. The natives say that there were originally more than seven thousand places of worship consecrated to Mahádeo, within and around the city of Bhobanéser, containing no less than a crore of lingams, and the vestiges that remain, fully warrant a belief, that the place may have comprized some *hundreds* of buildings of this description, when in its most flourishing state. A considerable number of the temples are still in a tolerable state of preservation, though entirely neglected and deserted. Many more are now screened from the view by the luxuriant foliage of the surrounding jungles, or present merely shapeless masses of stone buried amidst tangled brushwood and rank vegetation.

Nor is the astonishing number of the Bhobanéser temples the only remarkable feature of the place. The style, size, and decoration of these singular buildings, add greatly to the wonder and interest of the scene. They are all constructed, either of reddish granite resembling sandstone, or else of the free stone yielded plentifully by the neighbouring hills, in the form of towers rounded towards the summit, with other edifices attached rising from a square enclosure, the wall encompassing which is now generally in ruins. Their height is never less than fifty or sixty feet, and the loftier towers reach to an elevation of from one hundred and fifty, to one hundred and eighty feet. Not a wooden beam it may be observed has been used throughout. The stones are held together with iron clamps. Iron beams and pillars are used where such aids could not be dispensed with, but in general the architects have resorted, in the construction of their roofs, to the method of laying horizontal layers of stone, projecting one beyond the other like inverted steps, until the sides approach sufficiently near at the summit to admit of other blocks being placed across. The exterior surface of the buildings is in general adorned with the richest and most elaborate sculptured ornament, and the ruined courts which surround them, are strewed with a vast variety of curious relics, as bulls, lingams and other symbols appropriate to the worship of Mahádeo, representations of

Ganésá, Hanumán, and various forms of Siva and Parvatí, Durgá, or Kali, Carticeya the god of war with his peacock, the female or energy of the same called Caumárí, and the Narasinha and Báman Avatars. The more finished temples have frequently large well polished slabs of the grey chlorite slate, or pot stone, let into three of their sides, on which are sculptured, in alto relievo, nearly as large as life, some of the above personages, executed with no mean degree of skill and symmetry. Carved in the coarser stone of which the walls are constructed, one observes figures of Apsarasas or dancing nymphs in groups or solitary; forms of Mahádeo and Parvatí sitting or standing together, generally in the most obscene attitudes; representations of warriors, horses, and elephants, engaged in combat or arranged in state processions: monsters resembling lions, with grim grotesque countenances, in various attitudes; and groups of a peaceful character exhibiting a Muni, or philosopher, imparting instruction to his pupils. The architrave of the door-way of every temple in Orissa is ornamented with the nine figures in a sitting posture, called the Nava Graha or nine planets, of which seven represent the divinities presiding over the days of the week, and the two remaining ones the brahminical ascending and descending nodes, Ráhu and Ketu.

The forms and character of all the principal temples at Bhobunéser, and indeed throughout the province, being exactly similar, a more particular account of the plan and distribution of the great Pagoda will answer the purpose of a general description. The edifices which compose it, stand within a square area, enclosed by a substantial wall of stone, measuring six hundred feet on a side; which has its principal gateway guarded by two monstrous griffins, or winged lions, in a sitting posture, on the eastern face. About the centre, the great tower, Bara Dewal, or sanctuary, in which the images are always lodged, rises majestically to a height of one hundred and eighty feet. It is composed of a cluster of stone ribs, alternately flat and semicircular, eight principal and eight inferior ones, springing from a square ground plan, which towards the summit curve inwards, without,

however, meeting. They bear, as it were on their shoulders, a cylindrical neck, and this, with the aid of brackets in the form of eight immense griffins or lions, supports the ornamented crest or head piece, shaped somewhat like a turban, which forms so distinguishing a feature in the temple architecture of Orissa. It consists of a huge solid circular slab, called the Amla Sila, from some fancied resemblance to the fruit of the Amlıka (Phyllanthus Emblica), on which rests another circular ornament, in the form of a large inverted earthen dish, and thence indeed called the "*Dihi Bandhi.*" Sometimes the two ornaments are repeated. On the summit stands, either an urn, or the Chakra of Vishnu, according to circumstances, surmounted by an iron spike, to which pendants are attached on occasions of ceremony. The best illustration that can be given, of the shape and appearance of the generality of these towers, is to compare them to a medicine phial or comfit bottle with the stopper inserted, though the comparison does not do justice to the picturesque effect of the grand and massive building which I am now describing. From each face of the sanctuary, at different degrees of elevation, a huge monster projects to a distance of several feet, which has the body of a lion, but a most grotesque and unnatural countenance, resembling nothing in the catalogue of terrestrial animals. The figure on the eastern face is by far the largest, and it has between its feet, an elephant of comparatively dimunitive size, on which it is trampling. This, it may be observed, is the common mode of representing the lion of Hindu mythology, one of the epithets of which is, Gaja Machula, or the destroyer of the elephant. The entrance to the tower lies through a large square vestibule or antichamber, crowned with a pyramidal roof, and surmounted by the crest or series of ornaments above described, which joins on to the eastern face of the sanctuary, and rises to about three-fourths of its height. It is called the Jagamohana, or that which delights the world, because it is from thence that the idol is generally seen and worshipped by pilgrims. These two buildings form the essential and most sacred part of the temples of Orissa. Farther in advance of the Jagamohana, and connected with it by a sort of colonnade, is another square edifice of precisely the same

form, but smaller dimensions, which is called the Bhag Mandap, or apartment in which the idol's food is served up, and afterwards distributed amongst the officiating priests, &c. The Court of the Ling Raj contains many other towers and temples apart from those already enumerated, in which a variety of the inferior deities, or less esteemed forms of the greater ones, are worshipped, and which add, by their style and number, to the general grandeur of its appearance, but do not need a separate description. The whole are adorned with a profusion of sculptured work, consisting of elaborately wrought cornices, beadings, arabesque and reticulated ornaments, and clusters of pilasters, with figures of men, animals, serpents and flowers intervening, arranged in such an infinite variety of devices, that the eye is absolutely bewildered in endeavouring to trace out any particular pattern or design. Amongst the ornaments on the great flat central ribs of the Bara Dewal, there is one peculiarly remarkable from its resemblance to some armorial, bearing or heraldic device. Mr. Erskine, I observe, has given the figure of a strikingly similar ornament in his account of the cave temples of Elephanta, vide Bombay Transactions, vol. i. page 217, and plate vi. The brahmins explain it to be a compound of the Gadá, Padma, Sankh, and Chakra, or Mace, lotus, conch-shell and discus of Vishnu, and it would seem therefore rather out of place, in the conspicuous position which it occupies on the walls of the Ling Raj; but, it may be observed generally, of these edifices, that the sculptors have by no means confined themselves, in their choice of ornaments, to emblems peculiar to the deity of the place.

The temple of the Ling Raj at Bhobanéser is both the finest monument of antiquity which the province contains, and likewise indisputably the most ancient. It took forty-three years to build, and local tradition as well as the histories of the country, concur in fixing the date of its completion, as A. D. 657.

We have no particular accounts, of the period and causes of the decline

of the city of Bhobanéser, and the worship of Mahádeo. Nearly all but the great temple, have been long since completely deserted; and the establishment kept up there, is on a very small and inadequate scale, under the patronage of the Khurda Rajas, whose ancestors granted all the lands and endowments, by which the brahmins attached to it now subsist. It is occasionally visited by the Bengalee pilgrims on their way to Jagannáth, and every year, at the Sheo Ratri, a considerable collection of Desi, or country pilgrims, are gathered together under its walls, to hold a mela or fair.

The ruins of two extensive palaces, belonging to the Rajas of the Kesari line, are shewn at or near Bhobanéser. There is likewise a very superb tank, lying north of the temple, called the Bindu Ságar, which forms a conspicuous object in the scenery of the place, and another, faced with stone, on the east, remarkable for its being bordered all round with rows of small antique looking temples, about thirty on a side, just large enough to contain the human figure in a sitting posture, in which sixty female ascetics, who had devoted themselves to the worship of Devi, are said to have lived and died many ages back. Amongst the curiosities of the environs, the attention of the visitor is generally directed to a huge figure of the lingam, forty feet in height, at the temple of Bháskaresar Mahádeo. It is formed of a single shaft of sandstone, situated partly in a subterranean vault, and part rising into the centre of a great tower, of the usual form, which is said to have been built round this impure and degrading object of worship, after it had been set up and consecrated.

Khandgiri.

About five miles west of Bhobanéser, near the village of Jagmara, in the Char Sudhi Khandaiti of Khurda, and still within the limits of the khetr, a group of small hills occur, four in number, from one hundred and fifty to two hundred feet in height, which present many objects of interest and curiosity. These hills called severally the Udaya Giri, Dewal Giri, Nil Giri and Khand Giri, (by which latter name the spot is now generally designat-

ed,) are composed of a silicious sandstone of various colour and texture, and are all curiously perforated with small caves, disposed in two or three irregular stories. Each of the caves is large enough to contain from one to two human beings in a sitting posture. Some of them appear to be natural cavities, slightly improved by the hand of man; others have obviously been excavated altogether artificially; and the whole are grotesquely carved and embellished. In one part, a projecting mass of rock has been cut into the form of a tiger's head, with the jaws widely distended, through which a passage lies into a small hole at the back secured by a wooden door,—the residence of a pious ascetic of the Vyshnavite sect. The ridiculous legend which the natives relate to explain the origin of these isolated hills, is, that they formerly constituted a part of the Himalaya, at which time they were inhabited by numerous Rishis, who dug the caves now found in them. They were taken up bodily, ascetics and all, by Mahábír Hanumán, with other masses of rock, to build the bridge of Rama, but, by some accident, were allowed to drop in their passage through the air, when they alighted in their present position. I am almost tempted to add, as a curious coincidence, that they are the only real sandstone hills found in this part of the country; but the geology of the district has not been sufficiently explored, to warrant my advancing such an assertion positively.

The summit of the highest rock, is crowned by a neat stone temple of modern construction, sacred to the worship of Párasnáth; all around, and in the neighbourhood of which, are strewed a quantity of images of the Nirvánas, or naked figures worshipped by the Jain sect, executed chiefly in the grey chlorite slate rock. At the back of these temples, a highly remarkable terrace is shewn, called the Deo Sabhá, or assembly of the gods, which is covered with numberless antique-looking stone pillars or temples in miniature, some standing, others lying on the ground, about two or three feet long, having, on each of the four sides, a figure of the naked Jain deity rudely sculptured The place is still frequented by the Jain or Parwár merchants of Cuttack, who assemble here in numbers, once every year, to hold a festival of their religion.

NATURAL HISTORY

INSCRIPTION ON THE KHUNDIGIREE ROCK KHONDA

Reduction to ¼ the size of the Original — Length of Inscription 12 Feet 10½ Inches

Printed at the Asiatic Lithog.ᶜ Press for the Asiatic Researches.

A short way up the Udaya Giri hill, the Nour or palace of the famous Raja Lalat Indra Kesari, is pointed out as the chief curiosity of the place. It consists of a sort of open court formed by a perpendicular face of sandstone rock, about forty feet in height, with shoulders of the same projecting on either side. Rows of small chambers have been excavated in each face, arranged in two stories, and divided by a projecting terrace. Both the exterior surface and the inner walls of the chambers are decorated with cornices, pilasters, figures, and various devices, very rudely sculptured, and the whole exhibits a faint and humble resemblance, in miniature, to the celebrated cavern temples in the south-west of India. The rude and miserable apartments of the *palace*, are now occupied by byragis and mendicants of different sects, who state that the place had its origin in the time of Buddha, and that it was last inhabited by the Rani of the famous Raja Lalat Indra Kesari, a favourer of the Buddhist religion. Many odd fables are related of the scrapes into which she was led by her heretical notions, and of the way in which her conversion to the orthodox system of worship was at last effected.

Farther up the same hill, on the overhanging brow of a large cavern, one meets with an ancient inscription cut out of the sandstone rock, in the very identical character which occurs on the pillars at Delhi, and which as yet has been only very partially decyphered. Having been enabled to obtain an exact facsimile of this interesting monument by the assistance of Colonel Mackenzie, whom I conducted to the spot in 1820, I shall annex the same to the Appendix of this paper. There are I think two eminently remarkable circumstances connected with the character used in the above inscription. The first is the close resemblance of some of the letters to those of the Greek alphabet, and the second the occurrence of it on sundry ancient monuments situated in widely distant quarters of India. In support of the first assertion, I need only point the attention of the reader to those of the characters which are exactly similar

to the Greek ou, sigma, lambda, chi, delta, epsilon, and a something closely resembling the figure of the digamma. With regard to the second, any reader who will take the trouble of comparing the Khandgiri inscription with that on Firoz Shah's Lat at Delhi, on the column at Allahabad, on the Lat of Bhím Sen, in Sarun, a part of the Elephanta, and a part of the Ellora inscriptions, will find that the characters are identically the same.

A portion of the Ellore and Salsette inscription written in the above character, has been decyphered by the learning and ingenuity of Major Wilford, aided by the discovery of a key to the unravelling of ancient inscriptions in the possession of a learned brahmin, vide the eleventh article of vol. v. Asiatic Researches; and it is to be regretted that the same has not been further applied to decyphering the Delhi and other characters. The solution attempted by the Pere Trieffenthaler, does not seem to me to merit any attention.* The natives of the district can give no explanation whatever on the subject. The brahmins refer the inscription with shuddering and disgust, to the Budh Ka Amel, or time when the Buddhist doctrines prevailed, and are reluctant even to speak on the subject. I have in vain also applied to the Jains of the district for an explanation. I cannot however divest myself of the notion that the character has some connection with the ancient Pracrit, and considering that it occurs in a spot for many ages consecrated to the worship of Parasnath, which the brahmins are pleased to confound with the Buddhist religion, and that the figure or character-

* He says, speaking of Firoz Shah's pillar; Aprés avoir beaucoup et long temps cherché jái trouvé la signification de ces caractéres. Ce sont en partie des signes numeriques, en partie des figures d'instrumens de guerre dont es Indiens se servoient autrefois. Δ est le caracter de nombre huit: ε celui du nombre quatre; O désigne le sceptre de Rama joint Δ unglobe. N designe le figure d'une charrue qui etoit autrefois un instrument de guerre chez les Indiens. X a dela ressemblance avec la lettre qui signifie *C* on *K:* il est plus probable cependant que cette figure de *dix* Roman on *Ch* gréc désigne une fleur a quatre feuilles dont les gentils employent quelque fois la figure pour servir al' interponctuation des mots; Δ triangle qui est la Deesse, Bavani; ε est la charactere du nombre 6. E enfin designe une espece de hallebarde avec laquelle Ram coucha sur le carreau un geant a mille bras. De ce que ces caracteres ont de la ressemblance avec les characteres grecs quelques Européens ont cru que cet obelisque avoit ete elevé par Alexandre la grand: mais c'est une erreur, &c.

istic mark which appears in company with it, thus 卐,* does in some sort seem to identify it with the former worship, I am persuaded that a full explanation is to be looked for only from some of the learned of the Jain sect.

The Vishnu or Purushotama Khetr (Pursottem Chetr) extends, I believe, properly from the Bytarni to the Rassikoila river at Ganjam, but the more sacred part of it is comprised within a range of five coss, in the centre of which, termed fantastically the Sank'h Nábhi Mendel, and on a low ridge of sand hills dignified with the title of the Nilgiri or Niláchal (blue mountain), stands the famous temple of Jagannáth, "that mighty Pagoda or Pagod, the mirror of all wickedness and idolatry." The building in its form and distribution resembles closely the great Pagoda at Bhubanneswar; nor do the dimensions of the two edifices greatly differ, but the Jaganáth one has the advantage in point of situation. Altogether its appearance is certainly imposing from its loftiness and the mass of masonry which it comprizes, but the execution is extremely rude and inelegant, and the form and proportions of the principal object, the Bar Dewal or great tower, are, it must be acknowledged, by no means pleasing to the eye. The present edifice was completed A D. 1198 at a cost of from forty to fifty lacs of Rupees, under the superintendence of Param Hans Bajpöi, the minister of Raja Anang Bhim Deo, who was unquestionably the most illustrious of all the Gajapati princes of Orissa, and it seems unaccountable that in an age when the architects obviously possessed some taste and skill, and were in most cases particularly lavish in their use of sculptured ornament, so little pains should have been taken with the decoration and finishing of this sacred and stupendous edifice. Its appearance has farther suffered of late years from the exterior having been covered with a coating of chunam which has all been washed off excepting a few stains and patches, and still more from the barbarous practice now in force of marking out parts of the sculp- Jagannáth.

* Mr. Colebrooke, in his account of the Jains, gives the figure of a mark very much resembling this which he calls the Nandaverta, characteristic of the deified saint Ara.

ture with red paint. The material used for the construction of the temple is chiefly the coarse granite, resembling sandstone, found abundantly in the southern part of Cuttack. The following is a sketch of the plan of it. The edifices composing and connected with the temple which are very numerous, stand in a square area enclosed by a lofty stone wall, measuring about six hundred and fifty feet on a side. A broad flight of twenty-two steps leads from the Sinh Darwazeh or principal gate of entrance, on the east, to a terrace twenty feet in height, enclosed by a second wall four hundred and forty-five feet square, on which occurs first the apartment called the Bhog Mandap. In a line, and connected with it by a sort of low portico (the Mukt Mandap), is the great antichamber of the temple called the Jagmohan, which adjoins and opens into the tower or sanctuary. The tower itself rises to a height of about one hundred and eighty feet from the terrace, or two hundred from the ground. The ground plan is a square measuring thirty feet on a side. Most of the other principal deities of the Hindoo Pantheon have temples at this place situated between the two enclosures. The eastern gate is flanked and guarded by colossal figures of lions, or more properly griffins, in a sitting posture, and by smaller images of the mythological porters Jaya and Vijaya resting on their clubs, sculptured on the side posts. In front stands a column of dark coloured basalt, with a base of the mineral resembling pot-stone, remarkable for its light and elegant appearance and the beauty of its proportions, which supports a figure of the monkey-god Hanuman. One might guess that this is the work of artists of a different class and æra from those who raised the temple of Jagannáth, and the fact is really so, it having been brought from the famous, but now deserted, temple of the sun at Kanarak, about sixty years ago, by a brahmácharí inhabitant of Púri, of great wealth and influence.

Some ingenious speculations have been hazarded upon the origin and meaning of the worship of Jagannáth and the causes of the peculiar sanctity of the place, but amidst the conflicting and contradictory legends and

traditions which prevail, it seems scarcely possible to arrive at any satisfactory conclusion on the subject. The accounts given in the writings of the Hindus, more especially the Kapila Sanhita and the Khetr Máhátmya of the temple, are simply as follows, divested of the loads of declamation and repetition which embarrass the perusal of them. From the beginning of all things until the expiration of the first half of the age of Brahma, Parameswara, Sri Bhagwan, or Jagannáth, in other words Vishnu, dwelt on the Niláchal in Utkala Desa, in the form of Nil Mádhava. The fame of this form of the deity having reached the Court of Indradyumna, Maharaja of Avanti or Oujein, an eminently devout and pious prince in the Satya Yuga, he conceived a desire to perform worship at the sacred shrine, and accordingly set out on a journey to Orissa with a large army, after having first dispatched a brahmin to make inquiry. Just as he reached the spot on the expiration of a three months' journey, it was reported to him that the image of Nil Mádhava had disappeared from the face of the earth. The Raja was overwhelmed with disappointment at this intelligence, and fell into a state of the deepest melancholy and affliction until comforted in a dream by the deity, who informed him that although he had abandoned his former shape, he would soon reappear again, (or that a fresh Avatár would take place), in a still more sacred form, that of the Dáru Brahm which would remain to all ages. Shortly after, the Maharaja was apprized that a Dáru,* or log of wood of the Nim tree (Melia Azadirachta) was to be seen floating to the shores of Pursottem Chetr from the quarter of the Sitadwíp island, adorned with the Sankha, Gadá, Padma, Chakr, or several emblems of Vishnu, viz. the conch shell, mace, lotus and discus, and bearing a most divine and beautiful appearance. Transported with joy the pious prince ran to the sea shore, embraced the sacred log, which he was satisfied from the above symptoms must be a real form of Vishnu, and proceeded to deposit it with great ceremony in a consecrated enclosure. He then through

* Some accounts say that the Maharaja had first to perform a hundred thousand Aswa Med'h Jagya or sacrifices of the horse before favored with a view of this choice form of the deity, but as usual with every Hindu fable there is prodigious discrepancy in the several versions of it.

the advice of Nárad Muni, who had accompanied him, obtained the aid of Visvakermá, the architect of the gods, to arrange the image in its proper form. At the first blow of the sacred axe of the Hindu Vulcan, the log split of itself into *the four-fold image* or Chatur Murti. A little colouring only was necessary to complete them, and they then became recognized as Sri Krishna or Jagannáth distinguished by its black hue, Baldeo, a form of Siva, of a white colour, Subhadrá, the sister of these brothers of the colour of saffron, and a round staff or pillar with the chakra impressed on each end called Sudersan. The Raja's next care was to erect a temple and to establish the worship on a suitable scale of splendour. On the great day when all was ready for consecrating the temple, Brahma himself, and the whole company of the deities of Indra's court, came down from heaven on their several appropriate vehicles to offer up worship at the shrine of the lord of the universe, which, say the Urias, has since that period, and especially in the Kali yuga, maintained a rank and celebrity such as even Kásí, Bindraban, or Setu Band Rameswar, cannot boast of.

The Hindus of Orissa endeavour, though with vastly little foundation, to ascribe to the worship of Jagannáth a more *spiritual* character than is generally claimed for their superstition elsewhere. They refer to the common title of the divinity of the place, which implies the Brahma or Divine spirit that pervades and sustains the universe, and are fond of quoting a passage in the legendary account of the temple which runs thus, "Hear now the truth of the Dáru Avatár," (the appearance of the deity in the form of the Nim tree log,) "What part of the universe is there which the divine spirit does not pervade? In every place it exults and sports in a different form. In the heaven of Brahmá it is Brahmá; at Kylas it is Mahádeo; in the upper world it is Indra; on the face of the earth it is to be found in all the most renowned Khetrs, at Baddrika as Badrinath; at Brindaban and Dwaraka as Krishen; at Ayodhya (Oude) in another shape; but in the Khetr of Pursottem it appears in its true and most sacred form." The brahmins also have a practice of dressing up the figure of Sri Jeo

(lit. the holy spirit) in a costume appropriate to the occasion, to represent the principal deities, on the occurrence of the yearly festivals held in honor of each, which are termed the different Bhues, or Phases, of the Thakur. Thus at the Ram Navamí, the great image assumes the dress and character of Rama; at the Janam Ashtamí, that of Krishen; at the Kálí Pújá, that of Kálí; when the Narsinha Avatár is celebrated, that of Narsinh; when the Báman Avatar, that of the mighty dwarf. This would seem to evince some symptoms of a belief that in offering up worship to Jagannáth, his votaries do not confine their adoration to any particular deity, but adore the whole host of the Hindu heaven, or rather the spirit which animates them, whilst at other Khetrs the divinity of the place alone is worshipped. Mr. Paterson's hypothesis refers the worship now under consideration to the adoration of the mystical syllable, A, U, M, coalescing into Om, and is certainly the most ingenious and plausible that has been suggested, but goes far beyond the knowledge or comprehension of the most learned or intellectual of the present day. All the explanation which the more intelligent brahmins can or will afford on the subject, is, that they worship at Jagannáth, Bhagwán or the supreme spirit itself, and not any subordinate deity; that the images are shapeless, because the Vedas have declared that the deity has no particular form; and that they have received their present grotesque and hideous countenances, with the view to terrify men into being good. The same fancy which has invested the Khetr of Jagannáth with superior sanctity, is the cause, of course, of the unusual virtue ascribed to the Maháprasád, or food cooked for the deity, and consecrated by being placed before the images. The Khetr Máhátmya says, that Maha Lukshmí herself prepares and tastes it. He who eats it is absolved from the four cardinal sins of the Hindu faith, viz. killing a cow, killing a brahmin, drinking spirits, and committing adultery with the female of a Guru or spiritual pastor. So great is its virtue that it cannot be polluted by the touch of the very lowest caste, and the leavings even of a dog are to be carefully taken up and made use of. The most tremendous and inexpiable of all crimes, is to handle and eat the Maháprasád, without a proper feeling of reverence.

Without going into any profound speculation as to the origin, nature, and meaning of the worship of Jagannáth, there is one cause sufficiently obvious why all sects should here unite in harmony in the performance of their religious ceremonies, viz. that the temple instead of being consecrated exclusively to some form of the deity Vishnu alone, is in fact occupied, in joint tenancy, by forms of three of the most revered divinities of the Hindu faith. Balbhadra or Baldeo, (Balaráma,) the elder brother, who is treated with the greatest respect, though not so popular as his black relation, is clearly identified with Mahádeo, both by his white colour, and the figure of the serpent Shesha or Ananta* which forms a hood over the back part of his head; and Subhadra is esteemed a form of Devi or Kali, the female energy of the above. The precedence is always given to the elder brother; he has a rath or chariot of equal size with that of Jagannáth, and altogether the veneration paid to him is quite sufficient to conciliate the votaries of Siva, who are the only violent or bigoted sectaries. All other deities too are allowed to occupy niches or temples within the precincts of the great Pagoda, and are treated with so much respect, that the most obstinate sectary could not with any decency or consistency refuse to join in the general worship of the place.

The legend above quoted by me regarding the establishment of the worship of Jagannáth, does not provide for or explain the sacred deposit which popular belief, sanctioned by the brahmins, places in the belly of the image. Some conjecture it to be a bone of Krishna, but how it came there is not explained. As the image has been often remade of the wood of the Nim tree, it seems not improbable that it may be a relic of the old original idol which is thus religiously preserved. With regard to the Raja Indradyumna, he is mentioned by Wilford as famous in the fabulous legends relating to the Swéta Dwipa or White Islands of the west. The memory of his visit to Púri has been perpetuated, independently of the temple legends, by

* Both these words in Wilson's Sancrit Dictionary are explained to mean a serpent and a name of Baladeva.

a superb tank which bears his name. Either the author of the Ayin Acberi, or his translator, has confounded things together, in calling him Raja Indra Dummun of Nilkurpurbut (Nilgiri Parvat) instead of stating that he visited the sand hills at Púri called by that name in the Hindu writings. The assertion also of Abulfazl that the image of Jagannáth is made of sandal wood, is founded apparently on some confusion between the material appropriated to that purpose, and a bar of timber used for closing the entrance of the temple during the Chandan Játrá, thence called the Chandan Dáru or sandal wood.

The principal ceremonies of the temple of Jagannáth, its festivals, the rules for the collection of the tax, and general system of management, have been described with sufficient accuracy and detail by Hamilton. The monstrous idols of the place may be seen daily, with few exceptions, seated on their Sinhásan, or throne, within the sanctuary, but they are publicly exposed to view on two occasions only in the year, the Asnán and the Rath Játrás. At the Asnán or festival of the bath, Jagannáth and his brother, after undergoing certain ablutions, assume what is called the Ganesh Bhuës or form of the elephant-headed god, to represent which the images are dressed up with an appropriate mask. Thus arrayed, they are placed on a high terrace overlooking the outer wall of the temple, surrounded by crowds of priests who fan them to drive away the flies, whilst the multitude below gaze in stupid admiration.

At the Rath Játrá, the images, as is well known, are indulged with an airing on their cars and a visit to the god's country house, a mile and a half distant, named the Goondicha Nour, after the Rani of Maharaja Indradyumna who founded the worship. The display which takes place on this occasion has been often before described, but some brief notice of it will naturally be expected in a paper treating professedly of Cuttack.

On the appointed day, after various prayers and ceremonies have been

gone through within the temple, the four images are brought from their throne to the outside of the Lion gate—not with decency and reverence, seated on a litter or vehicle adapted to such an occasion—but a common cord being fastened round their necks, certain priests to whom the duty appertains, drag them down the steps and through the mud, whilst others keep the figures erect and help their movements by shoving them from behind, in the most indifferent and unceremonious manner, as if they thought the whole business a good joke. In this way the monstrous idols go rocking and pitching along through the crowd, until they reach the cars which they are made to ascend by a similar process up an inclined platform reaching from the stage of the machine to the ground. On the other hand, a powerful sentiment of religious enthusiasm pervades the admiring multitude of pilgrims assembled without, when the beloved images first make their appearance through the gate. They welcome them with the loudest shouts of joyful recognition and stunning cries of Jye Jagannáth, victory to Jagannáth; and when the monster Jagannáth himself, the most hideous of all the figures, is dragged forth the last in order, the air is rent with plaudits and acclamations. These celebrated idols are nothing more than wooden busts about six feet in height, fashioned into a rude resemblance of the human head resting on a sort of pedestal. They are painted white, yellow, and black respectively, with frightfully grim and distorted countenances, and are decorated with a head dress of different colored cloths shaped something like a helmet. The two brothers have arms projecting horizontally forward from the ears. The sister is entirely devoid of even that approximation to the human form. Their Raths* or cars have an imposing air from their size and loftiness, but every part of the ornament is of the most mean and paltry description, save only the covering of striped and spangled broad cloth furnished from the Export Ware-

* Jagannáth's Rath, called Nandi Ghos, measures forty-three and a half feet high. It has sixteen wheels of six and a half feet diameter each and a platform thirty-four and a half feet square. The Rath of Baldeo, called Thala Dhaj, is about forty-one feet high and has fourteen wheels. The Devi or Subhadra Rath called Padma Dhaj is forty feet high, the platform thirty-one square and fourteen wheels of six and a half feet diameter.

house of the British Government, the splendour and gorgeous effect of which compensate in a great measure for other deficiencies of decoration. After the images have been safely lodged in their vehicles, a box is brought forth containing the golden or gilded feet, hands, and ears of the great idol, which are fixed on the proper parts with due ceremony, and a scarlet scarf is carefully arranged round the lower part of the body or pedestal. Thus equipped and decorated, it is worshipped in much pomp and state by the Raja of Khurda, who performs before it the ceremony of the Chandálo, or sweeping, with a richly ornamented broom. At about this period of the festival, bands of villagers enter the crowd dancing and shouting, with music playing before and behind, each carrying in his hand a branch of a tree. They are the inhabitants of the neighbouring Pergunnahs, Raheng, Limbai, &c. called Kalabetiahs, whose peculiar duty and privilege it is, conjointly with the inhabitants of Púri, to drag the Raths. On reaching the cars, they take their station close to them, and soon as the proper signal has been given, they set the example to the multitudes assembled, by seizing on the cables, when all advance forwards a few yards, hauling along generally two of the Raths at a time. The joy and shouts of the crowd on their first movement, the creaking sound of the wheels as these ponderous machines roll along, the clatter of hundreds of harsh sounding instruments, and the general appearance of so immense a moving mass of human beings, produce, it must be acknowledged, an impressive, astounding, and somewhat picturesque effect, whilst the novelty of the scene lasts, though the contemplation of it cannot fail of exciting the strongest sensations of pain and disgust in the mind of every Christian spectator. At each pause, the Dytahs or Charioteers of the god advance forwards to a projecting part of the stage, with wands in their hands, and throwing themselves into a variety of wild and frantic postures, address some fable or series of jokes to the multitude, who grunt a sort of response at the proper intervals. Often their speeches and actions are grossly and indescribably indecent. The address generally closes with some peculiarly piquant allusion, when

the gratified mob raise a loud shout as their final response, and all rush forward with the cables. The progress made varies greatly according to the state of the roads, the care used in keeping the Raths in a proper direction, the zeal and number of the pilgrims, and the will of the priests or as they say of the god, the former having some method of choking the wheels, and thereby preventing the movement of the cars, notwithstanding the utmost efforts of the credulous multitude to advance forwards. Generally from two to three days are consumed in reaching the Gondicha Nour, where the images are taken out. Before even this period has elapsed, the curiosity and enthusiasm of the pilgrims have nearly quite evaporated, they steal off in numbers, and leave Sri Jeo to get back to the temple as he may. Without indeed the aid of the villagers before described, and of the population of Púri who hold their ground free of rent on condition of performing this service to the deity, the Raths would now-a-days infallibly stick always at the Gondicha Nour. Even the god's own proper servants will not labor zealously and effectually without the interposition of authority, and I imagine the ceremony would soon cease to be conducted on its present scale and footing, if the institution were left entirely to its fate and to its own resources, by the officers of the British Government.

That excess of fanaticism which formerly prompted the pilgrims to court death by throwing themselves in crowds under the wheels of the car of Jagannáth, has happily long ceased to actuate the worshippers of the present day. During four years that I have witnessed the ceremony, three cases only of this revolting species of immolation have occurred, one of which I may observe is doubtful and should probably be ascribed to accident; in the other two instances the victims had long been suffering from some excruciating complaints, and chose this method of ridding themselves of the burthen of life, in preference to other modes of suicide so prevalent with the lower orders under similar circumstances. The number of pilgrims resorting to Jagannáth has I think been exaggerated, as well as the waste of human life occasioned thereby, though doubtless, in an unfavorable-

season, or when the festival occurs late, the proportion of deaths caused by exposure to the inclemency of the weather, is very melancholy. The following is a statement of pilgrims of all classes who attended for the last five years at the three great festivals, procured from the most authentic sources, viz.

1817-18,	Paying Tax,	35,941	Exempt	39,720	Total	75,641
1818-19,	do.	36,241	do.	4,870	Total	41,111
1819-20,	do.	92,874	do.	39,000	Total	1,31,874
1820-21,	do.	21,946	do.	11,500	Total	33,446
1821-22,	do.	35,160	do.	17,000	Total	52,160

The Khetr of Jagannáth or Vishnu contains temples innumerable sacred to the worship of all the other principal deities, and some secondary ones rarely met with elsewhere, as the god Cuvera or Plutus, who has a curious antique looking temple amongst the sand hills on the coast. Shiva and his female energy are likewise fabled to reside constantly within its limits, in sixteen different forms, eight male and eight females. The male ones or Sambhus are figured by images called Yameswara[1], Visveswara[2], Gopal Mochan[3], Márkandeswara[4], Nilkantheswara[5], Trilochan[6], Bhuteswara[7], and Pátáleswara[8]; the female figures or Chandis have the appellations of Mangalá[1], Bimlá[2], Sarvamangalá[3], Kálí[4], Dhátrí[5], Kámákhyá[6], Ardha Astí[7], and Bhawání[8]. There is also a small Sikh College amongst the sand hills inhabited by three or four priests of that sect. The horrid practice of self-immolation of widows prevails less at Púri than might perhaps have been expected, with reference to the general character of the place and the numerous families which resort there to pay their devotions, the average of Satis not exceeding six per annum for the police division in which it is comprized. The concremation both of the dead and the living bodies takes place on the sea shore, close to the civil station, at a spot impiously called the Swarga Dwára or passage to heaven. There is this peculiarity in the rite as performed here, that instead of ascending a pile, the infatu-

ated widow lets herself down into a pit, at the bottom of which the dead body of the husband has been previously placed with lighted faggots above and beneath. The latest returns show the whole number of victims who destroy themselves annually in the above revolting manner, to average at from twenty to thirty for the entire district of Cuttack.

Kanarak. The Arka or Padam Khetr is distinguished by its containing the remains of the celebrated temple of the sun, called in our charts the black Pagoda which is situated amidst the sand hills of the sea shore, near the site of the old village of Kanarak, eighteen miles north of Jagannáth Púri. The Jagmohan or antichamber is the only part of the building which exists in tolerably good preservation. The great tower has been shattered and thrown down by some extraordinary force, either of an earthquake or lightning, and in its fall seems to have injured that side of the adjoining edifice which looks towards it. A small section however still remains standing, about one hundred and twenty feet in height, which viewed from a distance gives to the ruin a singular appearance, something resembling that of a ship under sail. The whole of the outer enclosures of the temple have long since disappeared, and nothing is left of the edifice called the Bhog Mandap but a heap of ruin, completely buried under a sand hill.

The black Pagoda even in its present imperfect and dilapidated condition, presents a highly curious and beautiful specimen of the ancient Hindu temple architecture, and as it has long been completely deserted, we may here study at leisure and without interruption, some of the most striking peculiarities of that style.

The deity of the place is called by the vulgar Sooruj Deo (Surya), and at full length, Chunder Sooruj Birinji Náráyan. The origin of the worship of a divinity so little honored in India generally speaking, is ascribed to Sámba, the son of Krishna, who having been afflicted with leprosy and banished from his father's Court at Dwarka, as a punishment for acciden-

tally looking in upon the nymphs of the palace whilst sporting naked in the water, was cured at this spot by the Sun, to whose service he in gratitude raised a temple. The present edifice it is well known was built by Raja Langora Narsinh Deo, A. D. 1241, under the superintendence of his minister Shibai Sautra. I cannot discover any authority for the assertion of the author of the Ayin Acberi, that the entire revenue of twelve years was expended on the work, but doubtless the cost was very serious compared with the state of the Raja's treasury. The natives of the neighbouring villages have a strange fable to account for its desertion. They relate that a Kumbha Pathar or loadstone, of immense size, was formerly lodged on the summit of the great tower, which had the effect of drawing ashore all vessels passing near the coast. The inconvenience of this was so much felt, that about two centuries since, in the Mogul time, the crew of a ship landed at a distance and stealing down the coast, attacked the temple, scaled the tower, and carried off the loadstone. The priests alarmed at this violation of the sanctity of the place, removed the image of the god with all his paraphernalia to Púri, where they have ever since remained, and from that date the temple became deserted and went rapidly to ruin. As above intimated, the origin of its dilapidation may obviously be ascribed either to an earthquake or to lightning, but many causes have concurred to accelerate the progress of destruction, when once a beginning had been made. To say nothing of the effects of weather on a deserted building, and of the vegetation that always takes root under such circumstances, it is clear that much injury has been done by the inhabitants of the neighbourhood, in forcing out the iron clamps which held the stones together, for the sake of the metal; and it is well known that the officers of the Marhatta government actually beat down a part of the walls, to procure materials for building some insignificant temples at Púri.

Abulfazl's quaint, but lively and picturesque, description of the temple of the Sun, is of course familiar to those who have perused the Ayin Acberi with attention. Although however it affords a good general idea of

the character of the building, it is strangely inaccurate in respect to measurements, no less than in the description of the emblems and ornaments which embellish it. Without noticing its several errors in detail, I shall first insert the description above alluded to, and then offer an account of the place as it appears to the visitor in the nineteenth century.

The author of the Ayin Acberi observes, (vide Gladwin's translation,) "Near to Jagannáth is the temple of the sun, in the erecting of which, was "expended the whole revenue of Orissa for twelve years. No one can "behold this immense edifice without being struck with amazement. The "wall which surrounds the whole is one hundred and fifty cubits high "and nineteen cubits thick. There are three entrances to it. At the east-"ern gate there are two very fine figures of elephants, each with a man "upon his trunk. To the west are two surprizing figures of horsemen "completely armed, and over the northern gate are carved two lions who "having killed two elephants, are sitting upon them. In the front of the gate "is a pillar of black stone of an octagonal form fifty cubits high. There "are nine flights of steps, after ascending which, you come into an exten-"sive enclosure where you discover a large *dome* constructed of stone up-"on which are carved the sun and stars and round them is a border where "are represented a variety of human figures, expressing the different pas-"sions of the mind, some kneeling, others prostrated with their faces up-"on the earth, together with minstrels, and a number of strange and won-"derful animals, such as never existed but in imagination. This is said "to be a work of 730 years antiquity. Raja Nursingh Deo finished this "building, thereby erecting for himself a lasting monument of fame. There "are twenty-eight other temples belonging to this pagoda, six before the "northern gate, and twenty-two without the enclosure, and they are all "reported to have performed miracles."

The wall which formed the outer enclosure may have measured about 250 yards on a side; within this was a second enclosure having three entrances called the *Aswa* or horse, the *Hasti* or elephant, and the *Sinha* or

Polygonal Column at Jagannath

Lion gate, from the colossal figures of those animals, which surmounted the several side posts. The horses and elephants on the north and south, have long since been precipitated from their bases, but the lions, or rather griffins, still retain the attitude and position assigned to them by Abulfazl, except that they are standing, instead of sitting, on the bodies of elephants, and have one paw lifted in the act of striking. Fronting the Sinh gate, stood the beautiful polygonal column, formed of a single shaft of black basalt, which now adorns the entrance of the Púri temple. It supported, at that time, the appropriate emblem of Aruna, the charioteer of the sun, which has since given place to Hanuman, and measures about thirty-three feet in height, instead of fifty cubits. The accompanying drawing will give a better idea, than the most elaborate description, of its chaste appearance and elegant proportions. Khambahs or columns of a similar description, though far inferior in point of style and execution, are frequently met with in front of the more ancient temples of Orissa. They are well known to the Hindu antiquary, under the name of "Jaya Stambhas or Pillars of Victory," though what their precise use or object is, has not been explained.

From the eastern gate of the inner enclosure, a flight of ruined steps leads to the only tolerably perfect part of the building now remaining, called the Jagmohan, or Antichamber of the Sanctuary. No one, certainly, can behold the massive beams of iron and the prodigious blocks of stone used in the construction of this edifice, without being struck with amazement. The ground plan is a square, measuring sixty feet on a side, or, if we take in the four projecting door-ways, it should rather be called a cross. The walls rise to a height of sixty feet, and have in some parts the unusual thickness of twenty feet. They support a noble and curiously constructed pyramidal roof, the stones composing which overhang each other, in the manner of inverted stairs, until they approach near enough towards the summit to support iron beams laid across, on which rests a prodigious

mass of solid masonry, forming the head-piece or crowning ornament. The slope measures about seventy-two feet, and perpendicular height, sixty-three or sixty-four. The total altitude of the building, from the floor to the summit, is about one hundred feet or a little more. The outside of the roof is divided into three tiers of steps, formed by slabs projecting curiously from the body of the building, which are all bordered with a very fine pattern of elephants, birds, and various figures executed with considerable skill and spirit. Each of the terraces between the tiers, is decorated with statues, placed at intervals, nearly as large as life. On the two lower ones, are figures of nymphs and heavenly choristers, dancing and playing upon sundry instruments, but with countenances expressing very little passion or feeling of any kind. The third story has the usual mythological animals, more nearly resembling lions than any thing else, which support on their shoulders the outer rim of the huge turban-shaped ornament on the top; besides these, there is a four-headed statue over each of the door-ways, the crowns and sceptres of which, mark them as intended to represent the majesty of Brahma.

Each face of the Jagmohan has a fine rectangular door-way, with a porch projecting considerably beyond and lined with superb slabs of the grey indurated chlorite, many of which measure fifteen feet high by a breadth of six or eight feet. The architrave of the door-way, as well as the roof of the passage leading to the interior, and an enormous mass of masonry resting upon it, are supported by nine iron beams, nearly a foot square by twelve or eighteen long, which are laid across the side ways in the most rude and inartificial manner. The whole fabric is held together by clamps of the same metal, and there is no appearance of any cement having been made use of.

If the style of the black Pagoda betrays, in the rude and clumsy expedients apparent in its construction, a primitive state of some of the arts, and a deficiency of architectural skill, at the period of its erection, one cannot but wonder at the ease with which the architects seem to have wielded

Door in the Eastern face of the Black Pagoda.

and managed the cumbersome masses of iron and stone, used for the work, in an age when so little aid was to be derived from any mechanical inventions; and it must be allowed that there is an air of elegance, combined with massiveness, in the whole structure, which entitles it to no small share of admiration. There is much, however, about this remarkable building, which it is difficult either to describe or comprehend. The interior is filled, to a height of several feet, with large blocks of stone, which seem to have fallen from above, and what purpose they answered, in their former situation, is a matter of great doubt and discussion. Amongst the heap are to be seen, two iron beams, measuring twenty-one feet in length by about eight inches square, absolutely crushed beneath a superincumbent mass of stone, many of the blocks composing which, measure fifteen and sixteen feet in length, by about six feet of depth and two or three of thickness. It seems probable that they formed part of an inner or false roof, but neither is it easy to assign any precise place for such a ceiling, nor can one divine the motive or object of elevating such prodigious blocks of stone to a great height in the building, when lighter materials would have been so much better adapted to the work.

The exterior of the side walls, as of the roof, is loaded with a profusion of the richest sculptured ornaments. A remarkably handsome cornice or border occupies the upper part, all round, for a depth of several feet. Below this, the surface is divided by another fine cornice, into two tiers of compartments, parted off into niches by clusters of pilasters, in each of which are placed figures of men and animals, resting on pedestals with a sort of canopy overhead. The human figures are generally male and female, in the most lewd and obscene attitudes, frequently in the very act of sexual intercourse. Amongst the animals, the commonest representation is that of a lion rampant, treading on an elephant or a prostrate human figure. Generally speaking, the style and execution of the larger figures, are rude and coarse, whilst the smaller ones display often much beauty and grace, but

it should be observed that the whole have suffered materially, from the corrosion or decomposition of the stone, of which the building is chiefly composed, viz. the coarse red granite of the province, which is singularly liable to decay, from exposure to the weather.

The skill and labor of the best artists, seem to have been reserved for the finely polished slabs of chlorite, which line and decorate the outer faces of the door-ways. The whole of the sculpture on these figures, comprizing men and animals, foliage, and arabesque patterns, is executed with a degree of taste, propriety, and freedom, which would stand a comparison with some of our best specimens of Gothic architectural ornament. The workmanship remains, too, as perfect, as if it had just come from under the chissel of the sculptor, owing to the extreme hardness and durability of the stone. A triangular niche, over each door-way, was once filled with a figure cut in alto relievo, emblematic of the deity of the place, being that of a youth in a sitting posture, holding in each hand a stalk of the true Lotus or Nelumbium speciosum, the expanded flowers of which are turned towards him. Each architrave has, as usual, the Nava Graha, or nine brahminical planets, very finely sculptured in alto relievo. Five of them are well proportioned figures of men, with mild and pleasing countenances, crowned with high pointed caps and seated cross-legged on the Padma (Nelumbium speciosum), engaged in religious meditation—one hand bears a vessel of water, and the fingers of the other are counting over the beads of a rosary, which hangs suspended. The form of the planet which presides over Thursday, (Vrihaspati or Jupiter,) is distinguished from the others by a flowing majestic beard. Friday, or Venus, is a youthful female, with a plump well rounded figure. Ketu, the descending node, is a triton whose body ends in the tail of a fish or dragon; and Rahu, or the ascending node, a monster, all head and shoulders, with a grinning grotesque countenance, frizly hair dressed like a full blown wig, and one immense canine tooth projecting from the upper jaw; in one hand he holds a hatchet, and in the other a fragment of the moon. These are doubtless the "sun and stars" menti-

oned by the author of the Ayin Acberi. Why they occupy, so uniformly, a position over the door-way of every temple in Orissa, sacred to whatever deity, I have never been able to learn.

The walls of the interior are, as usual with Hindu temples, entirely plain and devoid of ornament, but each of the projecting steps in the square pyramidal roof, has been curiously rounded, and formed into a sort of cornice, which gives a slight finish to that part of the building.

From the fragment remaining of the great tower, it would seem to have been covered with rich and varied sculptured ornament, in the style of the Bhubaneswer temple. Like all edifices of the kind, too, it had evidently an inner false roof, of pyramidal shape, formed of the inverted stairs used by the old architects of the province, as a substitute for the arch.

The Birjai or Párbati khetr, comprizes the country which stretches for five cos around the village of Jájipur (Yájyapura) on the banks of the Bytarini, as a centre. The sanctity of the place is, as usual, founded on a variety of fanciful notions and wild traditions, which it would be tedious to detail at any length. In the first place, its name, the "City of Sacrifice," is derived from the circumstance of Brahma having performed here, in ancient days, the great sacrifice called the Das Aswamed'h, at the ghat so called, to which all the gods and goddesses were invited. Amongst others, Gangaji was prevailed on to attend, and has since flowed through the district in the sacred form of the Bytarini, which, descending to the infernal regions by an opening near Jájipur, becomes there the Styx of the Hindu Tartarus. At this same sacrifice, a particularly holy form of Durgá, or Párvati, sprung up from the altar on which the burnt-offering was laid, and adopted the title of Birjá, whence the name of the khetr; from her, again, issued the eight Chandís, or representatives of the Sacti of Mahádeva; and their appearance was followed by that of the eight Sambhus, or lords of the Linga, who with their dependent lingas amounting in all to no less than a crore, Birjai khetr.

are stationed at different points, over the whole khetr, to guard it from the intrusion of Asurs, Rákshases, and other malignant demons. The titles of the female energies above noticed are Kóth Vásini, Siddheswari, Nibakhi, Uttareswari, Bhagavati, Kotaví, and Bhimaki; those of the males Trilochana, Someswara, Trilokeswara, Pranaveswara, Isáneswara, Akandeswara, Agníswara, and Siddhíswara, which the learned reader may compare with the epithets of the same divinities who protect and sanctify the Bishen Khetr.

Besides the aforementioned claims to veneration, Jájipur is farther esteemed, from its being supposed to rest on the navel of the tremendous giant or demon, called the Gaya Asur, who was overthrown by Vishnu. Such was his bulk, that, when stretched on the ground, his head rested at Gaya, his navel (nábhi) at this place, and his feet at a spot near Rajamendri. There is a very sacred well or pit within the enclosure of one of the Jájipur temples, called the Gaya Nábhi or Bamphi, which is fabled to reach to the navel of the monster, and into it the Hindu pilgrims throw the *Pinda*, or cake of rice and sweetmeats, which is offered, at particular conjunctions, as an expiation for the sins of their ancestors. The priests and inhabitants of Jájipur insist, that in 1821, a sudden rise of water took place in the well, which forced up the accumulated mass of sour rice cakes that had been there fermenting for months or years, and deluged the whole area of the temple with the filth. The occurrence was regarded both as a miracle, and as the forerunner of some great calamity.

The numerous stone temples on both sides of the Bytarini, executed mostly in a very respectable style of architecture, bespeak the ancient importance of the place; and history informs us that it was formerly one of the capitals of the Orissan monarchy. The Rajas of the Kesari dynasty held here their Court occasionally, as well as those of the Ganga Vansa line, and the remains of their *Nour*, or palace, at present an undefinable heap of ruin, are still shewn. The Musselman writers seem sometimes to mention Jájipur as a separate principality, in the time of the Ganga Bans Ra-

jas, but I can discover no ground whatever for such a territorial division. Mohammed Taki Khan, the Deputy of Shujaa Khan Nazir of Bengal, held his Court at Jájipur, and built a fine palace and mosque on the banks of the Bytarini, early in the last century, out of the materials of some dilapidated Hindu temple, the sculptured ornaments of which may be still observed in many parts of the walls. His palace, again, has been in great part destroyed by the officers of the present government, to obtain materials for the construction of public works in the neighbourhood.

The environs of Jájipur, present much to interest the curious, in its temples, khambas or columns in various styles, and fine remains of statuary. On one of the pillars, an inscription has been discovered, which is said to be of the same character exactly as that on the brow of the Khandigiri cavern of Khúrda. The most eminently curious objects of the place however, are, the images of certain Hindu goddesses, carved in stone, which I shall now more particularly describe.

At the back of a high terrace supporting the cenotaph of Syyed Bokhari, a Musselman saint, three colossal statues of the Hindu divinities, are shown. They lie with their heels uppermost, on a heap of rubbish, in precisely the same position apparently that they assumed, when tumbled from their thrones above, by the Musselman conquerors of the province, who destroyed a celebrated temple at the spot, and further desecrated it, by erecting on its ruins, a shrine and mosque of their own worship. The images are cut in alto relievo, out of enormous blocks of the indurated Mugni, or chlorite slate rock, and measure about ten feet in length. They represent Kálí, Váráhi the female energy of Vishnu, in the Varáha or Boar Avatar, and Indrání the lady of Indra, and though the subjects are grotesque, the execution is distinguished by a degree of freedom, skill and propriety, quite unusual in the works of Hindu sculptors. The first is a disgusting, but faithful, representation of a ghastly figure, nearly a skeleton, with many of the muscles and arteries exposed to view, invested with the

distinguishing marks and attributes of the goddess Kálí. She is seated on a car, or váhana, supported by a kneeling diminutive figure of Mahádeva. The second has a boar's head, and a huge pot belly, like that of Ganesa, and rests on a buffalo. The third is a well proportioned female figure, seated on an elephant, the animal consecrated by the Hindu Mythology to Indra, the lord of the Deotas.

On the banks of the river, one meets with a sort of raised gallery, filled with mythological sculptures, amongst which, seven large colossal figures of the female divinities called the Mátris, are particularly remarkable. They are said to have been recovered, lately, out of the sand of the river—where they were tossed by the Moguls on their shrines being destroyed—by a mahájan of Cuttack, who built the edifice in which they are now deposited. They differ little in style and dimensions, from those above described, but appear to be cut out of blocks of basalt, or greenstone, instead of chlorite shist. They are styled respectively Kálí[1], Indráni[2], Caumárí[3], Rudráni[4], Varáhiní[5], Vaishnaví[6], and Yama Mátri[7]. The figure of Kálí is sculptured in a very spirited manner; she is represented with an axe in one hand, and a cup full of blood in the other, dancing in an infuriated attitude, after the destruction of the giant Rakta Víja, and trampling unconsciously on her husband Mahádeo, who, as the fable runs, had thrown himself at her feet, to solicit her to desist from those violent movements, which were shaking the whole world. That of Jam Mátri, the "mother of Yama," is also a very striking and remarkable piece of sculpture. Her form is that of a hideous decrepid old woman, seated on a pedestal, quite naked, with a countenance alike expressive of extreme age, and that sourness of disposition which has rendered her proverbial as a scold. There are likewise fine representations in this mythological gallery, of the Narasinha Avatar, and the Giant Rávana, with his hundred heads and arms.

Bridges. Under the head of Civil Architecture I shall, in conclusion mention the Bridges of Orissa, which are certainly the most creditable, though not the

Ancient Hindu Bridge near Jaganath.

most magnificent, monuments remaining of its indigenous princes.* Many of these works are to be found in different parts of the province, still in excellent state of preservation. The principal bridges which I have seen, are, that between Simleah and Soro, of fourteen nálehs or channels: the Athárеh or eighteen náleh bridge, at Púri; the Chár náleh, in the same neighbourhood; the bridge at Delang, and another over the Dya, between Khúrda and Pipley. They are generally termed indifferently by foreigners, Mogul and Marhatta bridges, but the latter race during their unsettled and disturbed government in Cuttack, certainly never constructed works of so useful and durable a character, and besides the fact that the history of some of the principal ones is well known, it is quite obvious from a consideration of their style and architectural ornaments, that they are of pure Hindu origin, and belong to an age ignorant of the use of the arch. A short description of the Athárеh náleh bridge at Púri, will serve, to illustrate sufficiently this part of the subject. It was built of a ferruginous colored stone, probably the iron clay, early in the fourteenth century, by Raja Kabir Narsinh Deo, the successor of Langora Narsinh Deo who completed the black Pagoda. The Hindus, being ignorant how to turn an arch, substituted in lieu of it the method, often adverted to above, of laying horizontal tiers of stones on the piers, the one projecting slightly beyond the other in the manner of inverted stairs, until they approach near enough at top, to sustain a key stone or cross beam; a feature so remarkable in Hindu architecture, that it seems strange it should not have been hitherto particularly noticed, in any description of the antiquities of the country. The bridge has eighteen nálehs or passages for the water, each roofed in the way described. Its total length is 290 feet, and height of the central passage eighteen feet, and its breadth fourteen ditto; of the smallest ones, at each extremity, thirteen and seven respectively; and the thickness of the piers, which have been judiciously

* Mr. J. Grant in his Historical Analysis calls them, I know not why the "wretched edifices of rustic bridges."

rounded on the side opposed to the current, eight and six feet; the height of the parapet, which is a modern addition, is six feet.

Of the other native buildings of the province little need be said. The stone rivetment at Cuttack, a work of magnitude and indispensible utility, is probably of Mogul origin, built in imitation of a more ancient one, the remains of which are still to be seen. Fort Barabati has been described in speaking of the modern capital. The ruins extant of the old palaces of the Rajas, at Cuttack, Choudwar, Jájpur, and Bhubaneswer, are mere shapeless masses of stone and mounds of earth, which it would be fruitless to attempt any detailed account of. The ancient fortress of Sarengerh, on the south bank of the Kajúri, opposite to Cuttack, is remarkable for the great distance to which its works may be traced, but no portion of it remains habitable, and a modern killah, of the Musselman time, occupies the site of the citadel and palace of the first of the Ganga Vansa Rajas.

Scale of 4 Miles to an Inch.
2
3
4
5
10
15
20'
30'
50'

VI.

An account of a Tour made to lay down the Course and Levels of the River Setlej or Satúdrá, as far as traceable within the limits of the British authority, performed in 1819.

By Capt. J. D. HERBERT, 8th Regt. N. I.

IN 1819 in the course of the survey operations in which I was then engaged I traced the River Setlej to the confines of the British authority. Having drawn up a short account of this journey soon after my return I have thought that imperfect as it is, it might be acceptable to the Society. The only apology I can offer for the meagre nature of this communication (which indeed is little more than a description of the road travelled) is the constant occupation which my duties as Surveyor gave me and the long marches it was necessary to make on account of a deficiency of supplies. These two circumstances left me little leisure for observation or enquiry.

The Setlej has been lately known to derive its source, if not from the lake Ráwan Hrad, or the neighbouring one of Mansarovar, from the high ground on which they are situated. From the source however, which by Capt. Hearsey's map, is in 31° 46′ Lat. 80° 43′ Long. to Ropur in 30° 58′ and 76° 31′ a distance of upwards of 400 miles, little was known concerning it, or the

country it flows through, till the expulsion of the Gorkhas gave facilities to research which had before been wanting: the existence of a WESTERN BRANCH of this great river *beyond the snowy chain* was not even suspected, and to our ignorance of this fact may be attributed some errors which could be pointed out in maps very recently published. Of the actual direction of its course an equal ignorance prevailed, or it could never have been made a question, whether the BHAGIRATHÍ had its source *within*, or *beyond*, the snowy chain. We were equally ignorant of our proximity to the Chinese dependencies; to Ladhak and to Tibet the country of the Shawl goat; and of the fact of a constant communication being kept up between these countries and the newly subjected mountain provinces, by a route penetrating through the hitherto reputed insuperable barrier of the HIMALAYA. These, with some other less important particulars established in this journey, are new to Indian Geographers, and as such may be not unworthy of record.

The object of the tour was to explore and lay down as much of the course of this river as might be accessible. From the jealousy of the officers on the frontier, however, the survey necessarily terminated at the limit of our authority. At Shipki, the first village of Chinese Tartary, I was compelled to retrace my steps. From Roper to Shipki is about 250 miles, the whole line being through a mountainous country, at first easy of access and of inferior elevation, but afterwards approaching the limit of perpetual congelation and increasing in difficulties. The last 50 miles, comprehending the Pergunnah of Kanauwer, is within the chain of the Himalaya and forms the route above alluded to. It is to this portion of the survey, I have chiefly confined myself in the following narrative.

On the 1st September, I quitted Kotgerh* cantonment, accompanied by

* Kotgerh is on the left bank of the Setlej. It is in Lat. 31° 18′ 40″ long. 77° 28′ the elevation is 7783 feet above the sea. The climate is similar to that of the south of England, or perhaps a little more mild.

Lieutenant Patrick Gerard, of the 8th Regiment, then doing duty with the Nassírí Battalion of Gorkhas. We chose a circuitous route for the purpose of laying open a part of the survey not then visited. As little of interest however occurs in this early part of our journey, in which we passed through the lower mountains, I shall be rather brief in my notice of it. Our route lay in the first instance to the southward, crossing the Nagkunda pass, elevated 9800 feet. This ridge seems to be composed of clay slate passing into mica slate and quartz. It divides the supplies of the Setlej from those of the Giri river, which falls into the Jumna. A few miles to the east of the pass, is the fort of Whartu, if two guard houses built of unhewn stones deserve the title of fort. It is elevated 10,000 feet above the sea, and is therefore considerably colder than Kotgerh. The filbert and the sycamore (the former producing excellent nuts) were found here. The ascent was very steep, but there has been lately constructed an excellent road for horses, and a bungalow erected by Government, on the summit of the ridge, for the convenience of travellers.

After crossing the pass, we proceeded down the Salar stream, a feeder of the Giri, and crossed the latter, which is amongst the largest of the mountain rivers that have not their origin immediately from the snowy chain. We were now on the right bank of this river, and in the hill state of Kyunthal. Hence our course lay S. S. E. to Chepal Fort in Júbal, crossing two of the principal feeders of the Giri and their separating ridges, and latterly the great back, of which the Chúr is the principal peak, and which separates the river vallies of the Giri and Tonse. This ridge is a ramification from the snowy chain. It is of great height and steepness, and may be considered the principal ridge belonging to the valley of the Jumna. The Chúr, the loftiest of its peaks, is elevated 12,149 feet above the level of the sea. Many of the other peaks are not much less, and few of the passes north of the Chúr are under 9000 feet. It is well wooded; though some of its peaks rise above the limit of forest. The juniper, a species of red current, the yew, with all the varieties of pine except that peculiar to the Himalaya

tract, three species of oak, with a numerous list of alpine plants, are found here. The summit of the Chúr is grey granite of a coarse grain, which lower down is exchanged for mica slate. On that part of the ridge which I crossed as above mentioned, I observed only granular quartz.

On the 12th, we reached Chepal, and hence our route took a turn to the Northward, crossing the Salwe river, (a feeder of the Tonse) and the high ridge which separates its sources from the valley of the Páber. We passed through Deohra, the residence of the Rana of Júbal, one of the secondary mountain states. We crossed the Páber river under Raungerh, an inconsiderable fort, the water of which can be cut off. The passage of the Páber which is a large and rapid river, was effected on a hanging bridge of ropes 123 feet long and 22 feet above the water.

These bridges would seem to be on the same principle as our suspension chain bridges in Europe. Their swinging motion is very disagreeable, and generally gives the unpracticed passenger an idea of danger exceeding the reality. The tread is however a little unsafe, as the footway is quite open, just like a rope ladder, and some attention is required to avoid putting your foot through the opening instead of on the cross piece. The noise and foam too of a mountain river, dashing beneath, are not much calculated to strengthen one's powers of attention. To a novice it is rather a disagreeable mode of crossing a rapid river, but a little practice reconciles it, like all the other difficulties.

Here began our ascent of the Changshel ridge, the separating ground of the Páber and Rúpin, both branches of the Tonse, and both large rivers. This ridge is a ramification from the snowy chain and is of great height. It terminates above the confluence of the rivers, in rather a flat declivity, the less elevated parts of which are cultivated and well inhabited. The sides of this ridge are deeply intersected with large torrents, and in the glens formed by them are several substantial villages. Our path lay along its sum-

mit, latterly above the limit of forest; our camp on the 24th, having attained an elevation of 11,280 feet. Here we found just below our tents, the juniper, and black and red currants; the latter having a sweetish taste. The thermometer did not in the sun at noon rise higher than seventy-nine, and in the shade only 67° 5′. The following morning it was forty-one at day break. In proceeding along this ridge we attained an elevation of 13,000 feet. This part of the mountain was of course far above the zone of forest. It was however clothed with a luxuriant pasturage, richly enamelled with a thousand flowers, many of which were familiar to us as the production of Europe. There was very little of rock visible; here and there a patch of quartz of a dazzling white, and mistaken at a distance for snow. As the ridge rose, the shattered tables of gneiss were seen to connect it with the granitic peaks of the snowy chain. Descending from this lofty ridge we reached Dúdú on the Rúpin where we had ordered our supplies to be collected. The village is inconsiderable, and consists of but a few houses. It is chiefly remarkable as the residence of a petty marauder, who, before the establishment of the British authority, had contrived to make himself feared by his neighbours, on whom he levied contributions. From Dúdú, the route descended to the bed of the Rúpin, which we crossed by a *Sanga* of thirty-five feet in length, ascending thence to Kuara, a substantial village of about forty houses. The river was deep and rapid, and the mountains of great height.

On the 28th, we proceeded to Jako, the last village which we were to meet with on the southern face of the snowy range. The path was upon the whole difficult; our rate of progress being little more than a mile an hour. Two miles from Púja li or Kuara, we crossed the Rúpin once more on a *Sanga*, forty-four feet long, and eleven feet above the water. It seemed, even at this advanced point, a large river and the current very strong. After crossing, the ascent continues steep for about a mile, where the Rúpin receives another stream called the Berar, an equal body of water, if it be not (as I thought) the greater. After this, there is a good deal of descent, and

then a level path along the river edge, to the foot of the Tankúl defile, a very difficult and steep ascent to the village, by what might be called a natural flight of steps. The village is not large, and the inhabitants appeared ill looking and dirty. They have little cultivation, and depend chiefly on what they earn as the medium of intercourse between the people of Kanauwer and Chuára, in the exchange which is continually made of their respective commodities. The filbert was met with in great abundance to-day.

Beyond Jako, we were informed, no villages would be met with, till we should reach the inhabited country on the other side of the snowy range. It was therefore desirable to cross the pass if practicable in this day's march. But it was found that the difficulties of the road, and the delay occasioned by the construction of a sanga, on which we crossed the Rúpin for the third time, did not permit such quick progress. The evening was far advanced before we had reached the river head, and as we had now attained an elevation at which fire-wood ceases to be procurable, it became necessary to halt at this place, which had also the advantage of affording a degree of shelter to our followers in some caves and overhanging rocks.

The first three miles being a descent to the river bed, was an extremely bad path with a good deal of difficult descent. Here we were delayed by the construction of the sanga. The river was rapid and wide, and though fordable, yet it was with difficulty, and only by the united efforts of three or four men in a knot, that the current could be stemmed. The temperature of the water was so low as 43° and this added to the difficulty: after a delay of nearly three hours, we were enabled to proceed. The path continues rugged. An ascent arduous at first, afterwards easier, leads along the river bank, while the bed or valley opens a little. At the Sanga, the mountains approach each other so as to form a gorge, in which the extreme narrowness of the opening and the gigantic loftiness of the sides are very striking. Some idea of the place may be formed from the elevation of the almost overhanging crag, taken from the bed of the river, and found

to be 72°. Snow beds of some extent were now met with, shewing we were approaching the pass, and the frequent occurrence of the black and red currant, with the birch, indicated an elevation very near the limit of forest, and consequently led us to believe that the river head (judging from analogy) could not be far. We had now proceeded six miles and three quarters, of which the last mile or two had been in the river bed, and the path rather easier: an immense mass of frozen snow which appeared to have fallen into the river, and which was perfectly compact like rock, and not less than fifty feet thick, here excited our attention: the stream had undermined it, and forced for itself a passage, but the superincumbent mass was not the less firm or the more likely to give way: a little beyond this snow bed the path proceeds along a level piece of considerable width, agreeably shaded by birch trees; while the surrounding mountain masses, rising into turret-like peaks, with sides of a mural steepness, and bare, except where a narrow ledge affords nourishment to a few hardy creepers or mosses, and the whole crowned with eternal snows, presented a picture, which though naked and desolate, was by no means devoid of interest. Hence, the path is open, and presents few difficulties, occasionally leading over frozen avalanches, and along the river edge, which here spreads itself through this little valley, meandering with a placid current over a sandy bed. Our expectations of accomplishing the passage of the range, were strengthened a good deal by our meeting here a party from the village of Durgaon, on the Tonse, who were returning with salt from Kamrú in Kanáwer. They had crossed the pass about noon, and reported the old snow sufficiently firm, but the preceding day's fall, which was from two to three feet deep, was by no means so. The salt was carried on sheep, which are, in the upper mountains, universally employed for this purpose; each carries about five seers, and the load, being divided, is fastened on each side, to a little saddle or broad girth that passes round the body, and prevents its incumbering the animal or retarding its progress. Loaded in this manner they will, if the road be good, make marches of ten miles a day and keep in good conditi-

on, but then it is to be noted that the hill pasturage is excellent, and improves in luxuriance the greater the elevation, short of perpetual snow.

Towards sunset we reached the limit of forest, which made its last expiring effort in the production of a few stunted creepers of the Rhododendron genus. The elevation of the place was 11,281 feet above the sea, which may therefore be considered as the height of this limit: several caves, or overhanging rocks, capable of affording shelter to our followers, induced us to halt here, the evening being far advanced and no firewood procurable a-head. The night was very cold, and in the morning the thermometer was down to 34°; my companion shot here a *munal*, which afforded us an excellent dinner.

As we had a long and fatiguing march before us, we thought it advisable to take some refreshment before setting out. Accordingly, it was near ten o'clock before we were fairly in motion. The narrow valley already described continues for a mile and a half further; the river broad but shallow, and having little current. Fragments of every size, and of every kind of granite or gneiss, were strewed about; amongst them, some very brilliant, if not beautiful, specimens were observed, in which the plates of mica were of an unusual size. The valley was terminated by the ridge, apparently, of the Himalaya itself, rising in front of us, from the face of which, the river appeared to issue in a noble cataract of two falls from 100 to 120 feet each. We ascended by a winding path to the head of these falls, which were supplied by the partial melting of the vast mass of snow that filled the compass of the eye on whichever side it was directed. We were now at the immediate foot of this range, and all before us, to the very summit, was snow. The first part of our progress up this steep ascent, was little impeded by it; it was scanty though soft. As we advanced, it increased in quantity though not immediately in firmness; the ascent continued steep, and the fatigue was much increased by sinking. Here and there in this

immense wilderness, a turret-like peak was observed to break the unvarying whiteness of the picture, its wall-like sides denying the snow to rest upon them, though presenting occasionally a ledge on which a few birds that flitted about might alight; these turret-like masses gave a peculiar character to the scene. As we advanced nearer the summit of the pass, the assent became less severe, though the fatigue was still great, owing to the softness of the snow, in which we repeatedly sunk up to the middle.

The day was now far advanced, though we had proceeded but five miles; a long and weary way yet remained; and such was the exhaustion occasioned by the repeated sinking in the snow, that it is probable we should not have arrived in any reasonable time, but for a little refreshment which we had with us. At this great elevation, the simplest motion, the mere raising the hand, occasions fatigue, accompanied with a hurried breathing that is very distressing. Even when perfectly still, this latter affection is felt, caused, it has appeared to me, by a sense of suffocation, or rather, by a want of sufficient air. The servants and hill followers began to be alarmed at the length of way, seeing no immediate termination of the wintry horrors that surrounded them. To add to our perplexity, the sky became overcast, black clouds collected overhead, and at one time I even thought I felt a flake of snow, descend upon my outstretched hand.

A fall of snow, if at all heavy, would at this period of our progress, have been the destruction of probably half our followers, fatigued and dispirited as they were, and having five or six miles of snow to surmount whether they went on or turned back. Fortunately the alarm proved a false one; but the clouds continuing to collect and darken overhead, induced us to use the utmost expedition, that, if possible, we might reach the other side of the pass before a change of weather should take place; towards evening we discovered the summit rising in a wall of snow to the height of about

800 feet. To surmount this ascent required the most arduous exertion, and we floundered about till nearly exhausted, in a soft acclivity of snow, lying at an angle of about 30°. In time however, we reached the crest of the Gunás Pass, extremely fatigued, and not a little pleased in thinking we had no more *ascent* before us.

A long and dreary way, however, yet remained : as far as the eye could reach, a dismal expanse of snow met our view ; the sun too was nearly set, and the temperature sensibly decreasing ; except my companion and myself, with one or two servants, none had yet reached the crest of the pass : most of the hill carriers had indeed arrived at the foot of it, but there they stood with despairing countenances alike unwilling and unable to ascend the lofty scarp which still remained to be surmounted. A report, too, was brought us, that one of them was taken ill, and was unable to proceed. It became therefore necessary to abandon the baggage, as giving the only chance of our followers getting over their difficulties before night fall. It was not without some trouble we could get them to understand this measure, so that it was nearly dark before they were fairly across. The moon rose, however, nearly full, and her light, reflected from the expanse of snow, left little fear of our mistaking our way. The snow too was sufficiently hard to render the footing more firm than it had been in the former part of the journey, and being a descent the whole way, there was no cause whatever for apprehension or dismay ; the people were however not the less alarmed, some sat down and cried, others were prevented from lying down in the snow only by threats, and all, with very few exceptions, looked frightened in no small degree. Those who gave least trouble were the Gorkha sepoys, and Musselman servants, from the plains. The lower mountaineers from Jounsar, even though rid of their loads, were not to be encouraged. About eight at night we began to lose the snow, and presently after came to some overhanging rocks, capable of sheltering our followers in case of a change of weather.

A few stunted bushes of dog briar, the only fuel, served to restore some

animation to the people: on enquiry, we found, that three men were still behind. An intelligent non-commissioned officer, accompanied by some of the people from the village Jako, was ordered to return to the pass next morning and seek for them; they were found on a rock in the snow, but on this side of the pass, and it appeared that they had been much alarmed at the idea of passing the night in such a place, and not a little rejoiced to see the people I had sent for them. They came in in good time, and without having suffered any ill effects from the exposure to the cold. Considering the great length of way we had come over snow, it was very satisfactory to find, that amongst so many only one had suffered, owing to the care which had been taken to make them provide themselves with blankets, stockings, and shades for the eyes. This one man had neglected to defend his eyes from the glare, which, reflected from the snow in so pure and thin an atmosphere, is very great; the consequence was, that he was perfectly blind, for a day or two; after which he gradually recovered the use of his eyes.

As by far the greatest part of our baggage was still on the south side of the pass, it was necessary to think of some means of getting it up. On promising a rupee for each load that should be recovered, the carriers set off in high spirits, and in the course of the day every thing was brought in. The day was fine, and we had an opportunity of looking about us and admiring the scene; a scanty pasturage, on which a few herds of yaks were seen grazing, and some bushes of the dog briar, were all that we saw in the shape of vegetation. The place we were encamped on, called Nuru Bassa, is on the left bank of a stream which has its rise in the snows of the pass we had just crossed; it runs about north, or little east of north, to join the Baspa nearly opposite Sangla. Above or around us, nothing was seen but huge peaks capped with snow, the lower limit of which was not many feet above our camp. Although the elevation did not much exceed 13,000 feet, so great was the cold even at this season of the year, that all the streams were frozen, and during the evening a heavy fall of snow came

on, and gave us an opportunity of congratulating each other that we had not deferred the passage of the range. This snow storm interrupted a trip we had contemplated making to revisit the pass, and which we put into execution the following morning. We found the distance about four miles and a half, which occupied us three hours, being continued ascent and rather steep latterly.

Undisturbed by anxiety, we now found ourselves with sufficient leisure to observe and to enjoy this singular scene. Seated on this primæval ridge, which at a distance had been so often the subject of admiration and wonder, it still seemed a matter of surprize to us how we had reached such a spot. Around us, and rising from the platform on which we stood, were seen many of those peaks which form such conspicuous objects from the plains: though elevated nearly 16,000 feet above the sea, we still looked up to those stupendous structures before whose superior height the Andes themselves sink into inferiority. Their nearness and consequent great apparent magnitude, the idea that we were now close to objects so often viewed from great distances, and which had so often exercised conjecture; these and a thousand other circumstances gave an interest to the scene, that it is difficult to communicate by any description. On every side a vast expanse of snow met the view, the eternal abode of wintry horrors, where the animal and vegetable creation are alike oppressed, and nothing is seen but barrenness and desolation; conjecture is lost in attempting to fix the extent, the depth, or the duration of these snows, which belong to a chain at once the highest and the most extensive in the world.

As viewed from this spot, the Himalaya is far from being a regular ridge, or single series of peaks; they are seen in every direction, rising up from amidst the wilderness of snow that extends many miles in breadth. Looking to the north, the eye traces the stream, on the banks of which our camp lay, to its junction with the Baspa, not that the actual waters of either are seen, for they lie far too low for the eye to detect them, but the general run

and junction of the two vallies is distinguishable. Beyond the Baspa, again, appear peaks still higher than those of the ridge on which we stood, from which it seemed as if the range here took a turn, the Baspa coming from the salient angle, and being shut in by an external or double ridge to the southward. It has been thought by some, that the northern ridge is distinguished by the name of Kailas, while the southern retains that of Himalaya, but I have not myself observed any distinction of this kind, made by the mountaineers. It has rather appeared to me, that they, as well as the people of the plains, call every high place by the term Kailas, and apply it equally to the southern as to the northern ridge.

The snow on the pass we found perfectly hard, and having a most beautiful crystallized surface. This peculiarity of appearance I have almost always observed in snow that is situated above the limit of congelation. We endeavoured to guess at its depth, by sounding with our longest sticks, but, though assisted by the whole length of the arm up to the shoulder, we could not touch ground. Indeed as it is hardly to be supposed that this snow melts in any quantity to be compared with what falls annually, it must be considered as the accumulation of ages. It is evident, notwithstanding the elevation, that a small quantity *does* melt, for a thermometer hung close to the surface of the snow, the sun shining on it, rose above 60° : still the yearly supplies must greatly exceed the waste, so that we may, without hazarding an error, well suppose it on the increase. The thermometer in the shade was 37°.

Towards noon we returned to Camp, and the following morning quitted this inhospitable spot. The thermometer at day-break was observed to be 24°; the ground was as hard as iron, and the streams and springs all frozen ; our path led down the glen, watered by the united Rakta stream, of which the left bank, or that we traversed, had an easy declivity, occasionally diversified with small flats or level pieces of pasturage in which every production we saw reminded us strongly of Europe. The opposite bank was

steep and rocky, sometimes clothed with dwarfish bushes, but oftener quite bare ; four miles brought us once more within the verge of trees, soon after which we entered a noble deodar or pine forest, in which we observed some productions of uncommon size and beauty ; very little below this point, we found wheat and barley almost ready to be cut. The fields were divided and marked out by what are called stone hedges, and there were small huts flat-roofed for the accommodation of those who had to watch or cut the grain, the village itself (Sangla) being still at a considerable distance. Six miles and a half from our camp, we emerged from the forest, where a scene, beautiful and picturesque in a high degree, presented itself to our view, a broad and rather swift river watered a fertile and green valley of considerable width. On this side, were seen immense forests down to the very edge of the water ; on that, the more open and well contrasted appearance of successive table lands rising from the river bed, cultivated, and their borders shaded by poplars and willows, while in the middle of two of the largest, the eye rested on two substantial villages, containing each not less than eighty houses ; below, every thing was green and smiling, but as the eye rose, it once more encountered the black and naked rocks, and, still higher, the eternal snows of the frost bound Himalaya. We crossed the Baspa, the river above noticed, on a well boarded and railed sanga ninety-one feet in length, and took up our quarters in the nearer of the two villages, Sangla. The distance was seven miles and three quarters, the whole a considerable, though not steep, descent.

We were now in Kanáwer, a purgunnah of the mountain state Bissahir. Previously to entering into any detail of our journey over this new ground, it may be proper to throw together a few particulars, which though the result of the journey, and consequently not in order here, strictly speaking, may yet render what follows more intelligible.

Kanáwer comprehends the valley of the Setlej and its principal feeders, from lat. 31° 33′, long. 77° 47′, to lat. 31° 51′, long. 78° 42′: on the north and

east it is conterminous with the Chinese possessions, and on the west with the Tartar purgunnah of Hangareng, also subject to Bissahir, with Ladak, and with Kúllú, a mountain state situate on the right bank of the Setlej, and now subject to Runjeet Sinh. It may be said to be entirely within the Himalaya range, though extending from north to south forty-three miles; for, on the south, it has the ridge that had been crossed, the peaks of which have an elevation of from 19 to 21,000 feet, while to the north of it is seen the Purkyul ridge, the highest peak of which is near 22,000 feet high. The villages are not numerous, but they are some of them more substantial than are generally seen in the mountains. Kánam and Sungnam are two of the largest, and contain about a hundred families each. The houses are built of hewn stone, with occasional layers of the Deodar pine, which at the corners are fastened with wooden keys. The roofs in the lower part of Kanáwer are sloping, and formed of shingles; in the upper part, where violent winds prevail, they are flat and covered with earth; the former are generally two stories high, sometimes three and even four, with a balcony on one or two sides, in the latter they are seldom more than one. Still farther north of it is Larí, in Ladak; the houses are built of unburnt bricks; the climate being such that little rain or even snow ever falls.

Some of the villages are situated in the immediate *valley* of the river; many in the glens watered by the large feeders which derive their supplies from the snows of the Himalaya; their elevation is generally from 8 to 9000 feet, though some are much below and others much above this estimate. The soil appears to be totally different from that of the southern mountain provinces. The grape cannot be naturalized by any efforts or any care out of Kanáwer (within the mountains I mean;) the Neoza pine, the seeds of which are excellent and form a valuable article of export, is not to be found beyond the limits of this tract. The turnip too attains a perfection in Kanáwer which it wants elsewhere; and the apples are alone those, within the circuit of the mountains, worthy of a comparison with the

same fruit in England. Of grains they have the usual varieties, most of which are mentioned by Mr. Moorcroft. Wheat, barley, chenna, paphro, ora; of these the latter is valuable for its hardiness, flourishing in climates where no other grain will live. Barley is found at great elevations also. Of wheat they do not appear to have much.

The people of Kanáwer are tall and rather handsome, with expressive countenances; they are not, however, so fair as I should have expected to find them in so cold a climate. Their manners are good; they are open and communicative without being deficient in respect. They are almost all traders, and consequently great travellers, visiting Leh, Garu, and the other marts, chiefly for salt and wool. Their exports are grain, much of which they receive from the lower mountains, raisins, neozas, iron, and broad cloth, which they obtain at Kotgerh, &c. They possess a degree of wealth and consequence which no other mountain tribe has attained to; their language is essentially different from that of the Tartars, and has even no affinity with the other mountain dialects; whether it be related to any of the dialects of the south is a point on which I am unable to offer any opinion.

The Rocks of Kanáwer are those of the snowy chain: a large river like the Setlej, penetrating through this chain and with its numerous feeders laying bare the order and varieties of its parts, and displaying so clearly their structure, offers a field for research which promises to repay any Geologist who shall devote his exclusive attention to it. My duty as Surveyor left me little time for attending to these matters, even if my acquaintance with the subject had fitted me for the enquiry. Such obvious appearances as must strike the most unobserving I may mention. On the pass we had crossed, the only rock is a blackish gneiss of a fine grain, and imperfectly laminated. In the bed of the Baspa, rolled pieces of granite of every variety are to be met with; and in the journey upwards, granite occurs frequently, as also gneiss, quartz, and clay and mica slate. At Murang the granite is exchanged for clay slate, which continues for a considerable distance, and to

a great elevation (13,000.) In the bed of the river where this change takes place, mica slate of a dark brown color and horny structure is met with in large masses, and quartz also, both semi-crystallized and perfectly so. The clay slate, which continues from Murang through varying levels, is exchanged for granite again at Dabling, and this further on, for a very fine grained and imperfectly marked gneiss of a blueish grey colour. To the north of Shipki and in the Tartar Purgunnah of Hangarang, the mountains are of a rounded form and apparently composed of clay slate. The specimens which I have the honor to lay before the Society, may perhaps enable some Mineralogist to give a more correct and detailed account of this matter.

Kanáwer is divided into several Purgunnahs, but they are too minute to be worth particularizing. The upper part is divided into two, Süa and Túkba, the latter of which is again subdivided into upper and lower. Süa or Süang, extends along the right bank of the Setlej, and Túkba along the left, that is the upper Túkba ; the lower comprehends the valley of the Baspa, and contains the following villages :

Kamrú or Mohni, about - - - - - - -	70 or 80 Houses.
Singla, - - - - - - - - - - - - -	70 or 80 ditto.
Chilkul, - - - - - - - - - - - - - -	4 ditto.
Rakchan, - - - - - - - - - - - - - -	2 ditto.
Barsini, - - - - - - - - - - - - - -	1 ditto.

The last three are towards the head of the river ; Chilkul being three days march of about seven miles each ; Rakchan about seven miles, and Barsini about three miles, or two and a half. There is a pass beyond Chilkul, to Nilang, on the Járanbbi, (a place I visited in August, 1818,) by a route leading up the river bed. A man of the Chilkul village, was pointed out to me who had traversed this pass, he described it as presenting a series of difficulties of the worst kind. He travelled four days (from

Chilkul) before he reached the head of the river, thence ascending the pass he had three day's snow, and lastly two of descent to Múkba on the Bhagirathi; from Múkba to Nilang, his route coincided with mine. Nilang they also call Chúngsa, which they say is the Tartar name.

Salt is in these mountains the great incentive to discovery; it is the want of this necessary that induces them to undertake journies of great length and privation, and it is in search of it, and with the view of shortening as much as possible the route, or of obtaining it cheaper, that these people continually attempt what may be called voyages of discovery. From Nilang they could of course obtain it, did not the difficulties of the road present obstacles in the way of a frequent communication, besides which the people of that village charge more than those of others. At present this part of Kanáwer receives its salt from the Tartar villages of Stang and Bekar, situated on the Setlej, below Cháprang. There are two routes to these villages, the one by Shipki is long but presenting no extraordinary difficulties, and having a succession of villages the whole way; the other is a shorter route, but the difficulties are said to be very great. In this case they go up but half-way towards Shipki, and strike off towards the right or east, leaving the bed of the Setlej, and crossing the main range of the Himalaya they descend on the other side again into its bed. Cháprang is represented to be but six days journey (for loaded sheep) from Shipki; from Nilang they represent it but eight; the nature of the road from Nilang to Cháprang they describe as excellent, and passable for horses the whole way.

A few miles below Sangla, the Baspa river joins the Setlej. Our route crossed the high ridge, which runs down as a ramification from the snowy chain towards the point of confluence. The ascent begins about three miles from the village, which is the length in this direction of the cultivated table land already noticed; at this termination of the flat, the river assumes a new character, and the appearance of its channel is precisely as though it had, after rising to a great height, broken through a natural or

casual barrier that had obstructed its course. A ledge of rocks is still seen to extend across the valley, with the exception of the narrow outlet, through which this hitherto smooth and placid river precipitates itself in a body of foam down a precipice of about fifty feet, and thence is seen to wind its way under the usual appearance of a rapid though obstructed torrent. With the immediate bed, the river valley also alters, from a considerable width with sloping sides, to a narrow steep gorge of great depth. Along the whole line of path which gradually ascends to the limit of snow, about 14 or 15,000 feet you look down upon the Baspa, a fearful depth below. The whole of this part of the distance is extremely fatiguing, the path occasionally bad, and not seldom dangerous. Hárang ki Gháti is the name of the highest point; it is the corner crest of the range rising above the confluence of the Baspa and Setlej. From thence the descent is easy through a pleasant forest of pines, amongst which I observed a species new to me producing a cone, the seeds of which form an article of export, being eaten as almonds; they are called Neozas. The species is, I believe, new to our European Botanists and the trivial name given by Dr. Govan is derived from the name of its seeds.

From Hárang Gháti, the view was tolerably extensive up and down the Setlej. It would have been grand but for the clouds, which seemed to have established themselves permanently on the snowy range, throwing down showers of snow which occasionally descended even to our level. The appearance of the mountains in the valley of Setlej is striking, almost bare, except where a strip of forest, here and there, forms an exception. Rising into snow clad pinnacles, they present a picture of barren desolation, and wintry horrors unmitigated, but for the casual intervention of a village which occasionally strikes the eye, and adds to the wonder that the scenery excites. All around in every direction rise snow bound ranges and peaks in endless confusion, while their slopes, consisting of little more than bare rock, scarcely offer a more inviting rest to the eye than their shattered and rugged crests, the abode of eternal snows. This picture, which how-

ever may have derived some of its sombre coloring from the cheerless nature of the day, I could not avoid contrasting with the picturesque and cultivated valley of the Baspa.

Our next march was to Püari, the patrimonial village of Fikam Das, the Wazir, as the mountaineers style him, of the Raja of Bissahir. It is situated in the bed of the Setlej to which the path gradually descends, not however without passing some very frightful places in which you overlook the river from a height of 4000 feet, the bank or mountain side appearing of a wall-like steepness. These places are all made more secure by the erection of a parapet to conceal from the passenger the naked and frightful depth of the precipice, which without such a cover would be sufficient to shake the steadiest nerves. We passed through Baring, a large village, in which we were agreeably surprized to see luxuriant vineyards; we found the grapes of an excellent quality and still better at Püari, and there is no doubt that from such fruit a very good wine might be made. Indeed, a fermented liquor is manufactured by these people from their grapes, but in such a rude way and by so uncleanly a process, as to bear little resemblance to wine, either in flavor, color, or transparency: they distil a spirit from the husks and stalks. The wild grape was met with to-day; it is said to be common.

At Püari, the Setlej is comparatively smooth and placid, and has a considerable width. There was formerly a bridge across it, similar to that at Wandipur in Tibet of which Captain Turner gives a view in his work. At present only the abutting or end pieces remain, but it was intended to repair it. The village contains about twenty or thirty houses of two to four stories, chiefly built of pine wood. There is a tolerable piece of level ground which is well cultivated; it is covered with vines and corn, besides some fields of excellent turnips, a vegetable which has attained perfection in Kanáwer. The elevation of this village was found to be 6008 feet above the level of the sea, and the river is not more than 200 feet below it. The dis-

tance from Mebar was nine miles and three quarters, and time of travelling six hours and ten minutes.

On account of the deficiency of supplies at the regular stage the next march was a short one, of four miles and three quarters to Púrbúni. The grapes were particularly fine at this village also, and in great abundance. The seyana, or headman, was very intelligent, and communicated to us the following particulars. His people were in the habit of visiting Gáru for Byangi wool. They took for barter, iron wrought and unwrought, (the former including horse shoes, swords and matchlocks,) tobacco and raisins. The matchlocks and swords were imported from the plains; the other articles were the produce of Kanáwer. They receive wool, salt, and a few goats and sheep. The Tartars he describes as a nation of shepherds, living in tents. The name of the Gáru Purgunnah is Tokbo; of the country Gangri Majika, of the people Zar or Jar. Gáru is only frequented, he says, by the shepherds during the season of the rains, when the pasturage is good, at which time are stationed there two officers of Usang and two hundred soldiers; at other seasons they remove to such places as afford the best pasturage. The names of the Purgunnahs, most famous for the wool, are, Sagtad, Bámtad, Majín, Súdúr, Chantaling, Mapang. Gáru, he stated to be fifteen days journey hence. At Nilang, on the Jáhnavi is a mine of lead which is productive. From thence, Cháprang on the Setlej is six days journey. A party of Kanáweris visited Nilang on a plundering excursion, but they went by the route of the Baspa, crossing a very high ridge in which for three days they travelled over snow. Thence descending they reached Múkba on the Bhagirathi; two men of the party died owing to the severity of the cold.

Púrbúni is rather a large village, the houses are built of hewn stone, with layers of Deodar; the roofs flat and covered with earth. The night was cloudy, and on looking out in the morning, we were surprised to see every thing quite white; a fall of snow had taken place during the night, but it

disappeared long before noon. The elevation of this spot was 7,318 feet above the sea.

To Raba, was a distance of seven miles and three quarters, which occupied us four hours and a quarter. The path was the usual succession of steep ascents and precipitous, and narrow ledges overlooking, from an amazing height, the river, the depression of which was observed 41°. Near Raba, we found the rocks felspar, which in many places was in a state of decomposition ; in general, and where not otherwise noticed, granite and gneiss are the prevailing rocks. We found here, as usual, excellent grapes, and the tops of the houses were covered with them spread out to dry for exportation. The vineyards were very extensive, and their produce very fine and luxuriant. During the evening much rain fell and the night was cloudy, but there was no snow, although the elevation was 7540 feet.

After leaving Raba, the path gradually descends to the bed of the river which is here of considerable width, at first rugged and difficult, over huge rocks, and latterly along an even and level flat ; thence it ascends through rich vineyards to Rispa, a large village, the distance from Raba being five miles and a half. Beyond Rispa it continues high above the river bed, but presenting no difficulties, except the steep and almost perpendicular descent to the Tedang river, which here joins the Setlej, and which is shut in by mountains of great magnitude and wall-like steepness. We crossed it on a sanga immediately above its confluence. The width was forty-two feet and the depth and rapidity of the current considerable. The Setlej appears here with rather a smooth current and the bed is expanded. It is a large body of water, even at this depth within the snowy chain, and to form an idea from its size its source must be distant. We saw here some very beautiful masses of gneiss of a corneous fracture the appearance was that of a paste containing black prismatic crystals. There was much quartz of a semi-crystallized appearance but we saw no perfect crystals. We had now come within sight of Murang, a division of six hamlets spread out on the

opposite side of the glen. The names of these hamlets are, Gramang, Karjang, Shabeng, Korba, Thuáring, and Kwakba. We passed through Shabeng, along the edge of a small canal aqueduct pleasantly shaded by poplars, the vicinage adorned with luxuriant vineyards, here and there a neat hut peeping out from the freshness of the cool shade, rendered doubly grateful to us from the heat and dust we had endured in a twelve-mile stage occupying us from nine o'clock till sunset. The appearance of this place, green and luxuriant, contrasted well with the surrounding barrenness: below rolled placidly the deep waters of the Setlej; a castle situated on an insulated rock overlooked them, while the lofty peaks of the Raldang cluster clothed in snows crowned the whole, and finished a picture peculiar in itself, and deriving additional interest from the unexpected manner in which it stood forth embodied to our eye.

We encamped in Karjang, and immediately received a visit from the Zemindars, including the Lama with his attendants. This was the first village where we found the Tartar language and superstitions prevail. Hitherto we had been accustomed to brahmins, (of a degenerate race, no doubt,) but still Hindús, but here we had the worship of Budh fairly established. The Lama who resides here is considered the head of that sect; he was an intelligent man, and spoke Hindustaní tolerably well. He shewed us some books, in which we recognized the printed or stamped character of the Thibetians, but we regretted we had so little time (having arrived late) to examine them more minutely, and obtain some information relative to their religious opinions and ceremonies. He admitted that the snowy peaks were objects of great reverence; in fact he seemed to believe in a genius of the Himalaya whom he considered as entitled to worship. He called those peaks *Kailas* that rise immediately from the village, and which constitute the Raldang cluster, (visible from Sahâranpur.) They are on the left bank of the river, and are of great elevation; I consider them to denote, in this quarter, the position and direction of the chain, one of them, Raldang, is a

point fixed by the trigonometrical operations, in latitude 31° 29′ 22″ and longitude 78° 21′ 44″; its height above the sea is 21,251 feet. We regretted much that the arrangements made for the supplies of our numerous followers did not allow us to halt here. We could have been well contented to have taken a day's rest in so agreeable a spot; and besides this object, we should have been well pleased to have cultivated a closer acquaintance with our friend the Lama, who seemed both intelligent and communicative. We had however no choice, and at ten o'clock quitted Murang.

We left Murang at ten o'clock: the first two miles is a steep ascent up the mountain on the declivity of which it is situated. On reaching the crest of the ridge, we met traders belonging to the village returning from Májan, a district of Mahá Chín,* with eighty goat, sheep, and ass loads of byangí wool. They had a small shawl goat also with them, and we observed both in this animal and a kid of the same breed (which we had received in a present at Puari) the shawl wool proper lying under its outer and usual coat of hair: a dog too, of Tartar breed, accompanied them, in size and appearance a good deal resembling a Newfoundland dog. They had been three months absent, and seven of their sheep had died on the road, a duty of two pice per load was collected from them at Ritang, where a Chinese Sirdar resides. We had a long journey before us, and were not a little sorry we could not stop to have some conversation with them; but it was now near noon, and we were obliged to push on. We met with the gooseberry here in great plenty, though small and acid, a male yak,† kept for breeding, was seen grazing here. In Kanáwer they cannot keep up the breed pure, the animal degenerating, but a cross between it and the common cow is reckoned by them superior to either. They are of great size

* The Empire of China.

† Called by Captain Turner the bushy-tailed Bull of Thibet.

and are used in agriculture; they call them Zu (the male) and Zemmu (the female).

A little more ascent brought us to the summit of the Childing Kona Pass ; here we had an extensive view of the range, and some of the highest peaks appeared sufficiently near : to the north they were of less elevation, and some ranges were distinguished quite bare of snow. No forest however was seen, and their form or outline was rounded, without any of the sharp and shattered peaks of the Himalaya granite. The elevation of the pass is about 12,388 feet above the sea. The ascent still continued ; the path leading through rocky defiles, or along the face of clay-slate acclivities, in which the fragments that formed the footing had all the looseness and mobility of ashes. The last ascent was a flight of steps, cut in the rock to the summit of the Kherang pass, which judging by the depression of the one left behind (13°) must be about 1500 feet higher. This estimation of its elevation receives strength from the fact of our finding snow on it, and for several hundred feet down, on the northern face. Hence to Nissang, the descent was continued and steep, but the ascent had been so severe and the path so bad, that it was already late, and we did not arrive at the village till near seven o'clock, our followers all behind, and neither tent nor supplies up. We were so fatigued that we had little appetite, and, contenting ourselves with such fare as the village afforded, were glad to lie down and get some rest. The whole distance was eleven miles.

Nissang is inhabited by sixteen Lamas. It is a poor and inconsiderable village, situated in a most bleak, barren, and desolate spot. It is on the left bank of a stream, up the bed of which is a route to Stang and Beker, two villages on the Setlej, where these people frequently go for salt. The difficulties of the road are great, and the cold suffered, in passing a high ridge covered with snow, intense.

The next village, called Dabling, was represented to be at so great a distance

a-head that it would be necessary to divide it into two stages, in which case we should be obliged to encamp half-way, and would require provisions for one day with us. Having made our arrangements we left Nissang at a quarter to seven, and stopped to breakfast at a quarter to nine, at the last piece of water we were to meet for many miles. The descent from the village to the Tala Khír Nullah is steep but short. The ascent appeared at first difficult, if not impossible, on account of the seeming bareness and steepness of the mountain side. We however proceeded, climbing slowly up an acclivity of loose fragments, which latterly appeared to deviate more from the perpendicular, retiring from the face of the range, between high and projecting walls or cheeks that rose up on each side in threatening array. Every hundred yards we were compelled to take breath, and we did not reach the Gerí Púg Pass till noon, a distance of five miles from Nissang. As the path ascended, it retired, and became less steep, and latterly we saw some appearance of forest, particularly several species of juniper in full fruit. It was in fact the projecting crags I have already noticed that, concealing the route, had given us so exaggerated an idea of the difficulties; they were however still great; the ascent may be judged of by the depression of Nissang (24°), and the elevation of the pass appeared by the theodolite to be the same as the Kherang Pass, crossed the preceding day.

The path beyond this became frightfully bad, and frequently made me pause, familiar as I was with the difficulties of mountain roads. The loose fragments of every size, accumulated against the declivity of hard and bare clay slate mountains over which our track lay, equally threatened us from above and from below. Such was their mobility, that the wind was sufficient to detach them, and once set in motion, even one stone however small, was sufficient to bring down vollies upon us. Again, if the motion began from below, it threatened to carry away the very ground on which we trod, while nothing appeared to obstruct our progress down a de-

scent of some thousand feet to the river edge; not a tree, shrub, or blade of grass, even the rocks, appeared little capable of affording a point of support, for they were loose and crumbly and seemed to require but a touch to detach them. These difficulties continued for about a mile, after which we were much relieved to find matters improve, for a short distance. The descent however gradually increased in steepness, leading down the left bank of the Tomba glen, in which we had new difficulties and dangers to contend with. To have a correct idea of these places it must be borne in mind, that at this time we were proceeding along the declivity of the great snowy range: so lofty a range, it may be supposed, cannot rise from so low a level as the river has here, with the undeviating regularity comprehended in the terms slope or declivity; on the contrary it is necessary to view the Himalaya mountains themselves, those eldest born of creation, to estimate even approximately the gigantic scale on which the furrows or ravines formed by the numerous torrents that spring from their snows, intersect their sides. They indeed look to a spectator viewing them from above, like "the dark unfathomed *bottomless* abyss;" and it is not without awe he resolves "to tempt them with wandering feet."

Of all those glens that I have yet seen, this I think challenges comparison, for its depth, the steepness of its sides, its total bareness, and the great height to which the shattered peaks that crown it rise. From the lateral ridge, where the immediate descent commences, to the stream, is a distance of two miles and a quarter, of this a mile and a half presents no very great difficulties though the path is bad enough, but the last three quarters of a mile baffle description: at the first glance it seems impossible ever to reach the bottom, such is the steepness of this precipice, for it can be called nothing else; a winding path however, requiring the utmost caution in traversing it, is at length discovered, and you go down a hard dry and steep terrace, sprinkled as it were with loose fragments of clay slate of every size. To avoid moving these is impossible; to shelter one's self is equally so, and the only alternative for the people was to go in knots, with considerable intervals

and get over it as quick as possible. The crumbly and loose nature of the little gravel that covers it with the hardness of the subsoil, makes this place as dangerous as the other, for one false step or slip would precipitate one to the bottom. The last piece leads along the edge of a naked and steep precipice, the path being extremely narrow, and strewed as above described with a hard dry gravel. We got safe down however, although we had even then little cause for congratulation, for in the bed of the stream it was impossible to think of remaining. The cave in which the Murang people had the last year sheltered themselves, had disappeared, and instead of it we beheld the fragments of fallen peaks, the ruinous proofs of the vast power of the avalanche. The whole appearance of the place or ground, was insecure: to look up towards the head of the glen gave no confidence, for there you saw similar masses prepared for a similar descent. To ascend the other bank was then our only alternative, and our determination was hastened by the threatening appearance of the weather: a lowering gloom began to envelope the summits of the surrounding peaks, dark clouds collected, and every symptom was discoverable of an approaching fall of snow. We therefore quickly made our determination, and commenced a climb of about a quarter of a mile in which our hands and feet were equally employed. The path then got a little better, and we soon came to a more open place, where we thought there was less danger of being overtaken by falling peaks. The whole distance was twelve miles and a quarter, and we arrived at half past five, having quitted Nissang a little before seven. We had been very nearly ten hours on the road, and eight hours on foot, during which time we ascended and descended not less than 7,000 feet.

Our troubles were not yet at an end; many of our people were behind; it was fast getting dark, and we dreaded, lest not knowing the nature of the road, they should attempt to descend to the bottom of the glen, in which case their destruction we knew was inevitable: all night long a continued shouting was kept up from one side of the glen to the other, which

coming by intervals and in such a scene, had a singular effect. Fortunately they were wise enough to listen to our prohibitions, and to halt on the other side. In the morning they came in, and I was happy to find, notwithstanding the dangerous nature of the road, that there was no accident.

Thermometer at 40o a temperature indicating considerable elevation. We set out a little before seven, but, in consequence of the fatiguing marches of the two preceding days, did not deem it advisable to proceed more than six miles and a half, to Hopeha Wodar, a halting place (no village,) on the banks of a stream. Notwithstanding the early hour at which we set out and the comparative shortness of the stage we did not sit down to breakfast till 1 p. m. The path was in general good, and part of it was excellent and passable for horses : I must except, however, the immediate descent to the bed of the stream where we encamped, which was almost equal to any thing we had yet seen in danger and difficulty. There was not however much of it. We found it very cold during the day, and a high wind served to render it still more uncomfortable. The appearance of the place was bleak, barren, and desolate.

To Dabling, we found a distance of seven miles and a quarter, so that the whole route from Nissang to Dabling, in which no village or habitation is met with, was twenty-six miles. These miles it is to be recollected are however estimated in rather a rough manner, and therefore I lay no great stress on this value of the distance ; it is certain that it is not less than twenty. This path presents no difficulties but there is some steep ascent and descent. We observed granite in this march occupy the place of the clay slate which we have had from Murang, I may say. We passed the Pose or Namptu Sanga, a well constructed wooden bridge with railings over the Setlej at Pose. The river has the appearance of having been obstructed by a barrier of rocks, through which it forces for itself a passage: on these rocks, which still narrow the stream, the bridge rests. This bridge, I believe, wants repairs, and as it is in the principal, and least

difficult route leading to or from Chinese Tartary, it would add facilities to the little trade these people have, were it repaired. We were not sufficiently near to speak positively as to its state.

Dabling is more decidedly Tartar than either Murang or Nissang. The head-man, a Lama, came to pay his respects to us in a dress exactly similar to what is represented as the Chinese costume, his stockings were of woollen stuff, sewed, and ought rather from their shape, or want of shape, to have been called bags; his shoes were exactly Chinese, the soles having a spherical shape. He wore also a Chinese skull cap, but the other people in the village went bare-headed, and wore long tails plaited. They were all rather fair, particularly the women who had a fine rosy colour. We were very much pleased with the appearance of the assembled village, and could hardly help thinking we had got on the high road to Pekin. The name of this old man was Lama Ring Jing; he was a good humoured talkative man; and, as he was a traveller, we endeavoured to get some information from him; he shewed us a letter written in the Sirma character, from the grand Lama, sending him a sum of money to build temples, which he called Lahrang. He also shewed us a book in the Umma or printed character, in which were a great number of paintings of their deities, &c. neatly executed, but without any idea of perspective or keeping. The book consisted of thick leaves not sewed together; the ground or colour of the leaf was blue, while the letters were yellow; I was very anxious to obtain possession of it but I found no sum of money would tempt him to part with it: he told us he had been in the practice of visiting Cháprang every year for byangí, wool, &c. The journey occupies nine days, or if a horseman travels, five. Under Cháprang flows the Setlej, which the Kanáwarís call Zangtí, the Tartars Lang Jing Kunpa or Kumpa, the latter word signifying river: it is not fordable even at Cháprang; indeed little falling off can be perceived from its size here. It is crossed by a bridge of chains. From Cháprang, Teshu Lumbu is three months journey: Mansarovar is eighteen days journey from Shipkí, a place two stages a-head, and the boundary of our mountain possessions, a horse-

man may however travel it in twelve days. There are two routes, one by Cháprang along the river, the other by Gáru, the distance is nearly equal, but in the first, villages are met with, in the latter few, or none. The lake Mapang he describes as either seven or four days journey in circumference according to the season, and he maintains, how much soever questioned, that four rivers originate from it:—1. Tamja Kampa flows through Ussang; 2. Mamja Kampa through Púrang; 3. Lang Jing Kampa through Kanáwer; and 4. Sing Jing Kampa through Ladak.

These he repeatedly asserted he had seen, and says that they proceed from the four opposite corners of the lake. It is very extraordinary what could be his motive for so pertinaciously asserting a fact of this kind, so completely contradicted by Mr. Moorcroft's journey, and which no one can believe to be other than some legend of their sacred books. There is a second lake, close to Mapang called Langa Cho; it is smaller, but in the rainy season they unite and form but one. The Setlej he states proceeds from the great lake, and flows through the small one: a high peak called Gangri, and covered with snow, is much venerated by Hindus.

To Namja, was a distance of eight miles and three quarters, time of travelling five hours and a half. The path is in general free from danger, and not very bad: a mile and a half from Dabling, we passed through Dúbling, a smaller village than the preceding. The gooseberry, rasberry, and dog-rose; the poplar, walnut, and apricot trees were observed. Beyond Dúbling, the path descends to the river bed, along which it proceeds for some distance. We had here an opportunity of observing how little it appeared diminished in size, and of conjecturing the great distance of the source of so large a body of water. The current was, comparatively speaking, smooth, and few rocks obstructed it; the mountains on our side had some slope, they were composed of granite and quite bare, on the other side they rose up in a wall, or scarp, of two thousand feet from the very water edge. The strata had a

most curious and novel appearance, (at least to me;) they were twisted and waved, and apparently lifted up in different directions: beyond this spot, we observed the river for nearly half a mile collected as in a great lake; the surface smooth enough to reflect the surrounding mountains as in a mirror: it then precipitates itself down a step of rocks with all the foam and impetuosity of a cataract; the fall is however not great, perhaps about three or four feet. The river bed is of a moderate width, and here and there remains a level strand, of fifty to a hundred yards, along which the path lies. In this level piece, we observed frequent cumuli, or heaps of stones; they were built with some care, their length was various, their width about three or four feet, and their height the same; on the top were thrown loosely a number of stones covered with inscriptions, or rather, I should say, with one inscription, for on examining and comparing them, it was perceived that they were all repetitions of the mysterious expression noticed by Captain Turner, Om maw nee put men hoong. The letters were in relief and executed with considerable neatness.

Seven miles and a quarter from Dabling, we came to the confluence of a river of nearly equal size with the Setlej, but could not learn its proper name. The people called it Spiti Maksang. Spiti being the name of the Purgunnah it flows through, and Maksang signifying a river: the left branch, which is the largest, retains the name of Lang Jing Kampa, and is the proper Setlej. The Spiti appeared to flow here between two lofty walls of rock, and of great steepness: a small hamlet called Kap, of two houses, overlooks the confluence, and this is the highest place where the grape grows. There are no grapes at Dabling, but Dabling is considerably elevated above the river, though at Poï which is in the bed of the river, there are: the grapes of Kap are scarcely worth cultivating; they do not ripen properly, and are little better than the produce of the wild vine which is found in the lower part of Kanáwer.

Namja is a village of about twenty houses. It is situated in a most bleak,

barren, and desolate spot; a few fields of corn and some apricot trees are all that shew the vicinity is that of a village; the houses are, as always described, flat roofed, being covered with earth. From Murang, we had heard nothing but the Tartar language; here it was in perfection, yet strange to say, the Seyana or head-man's name was *Baliram*. In appearance he was a complete Tartar, and though it is true he spoke Hindustani (for he acted as our interpreter,) yet it was most barbarously, and with a peculiar accent. He had been a great traveller, and we found him very communicative; we determined, as he was the only person we could find capable of acting as an interpreter, to make him accompany us to Shipki; he told us that they trade with Shipki, Meyang and Cháprang, for salt and wool; that Cháprang is nine days journey from Shipki and Mansarowar twenty; on horseback, however, the former journey is performed in four or five days, and the latter in twelve. Meyang is two days journey from Shipki, the Setlej being left to the right; few mountains about it, and a little beyond it is plain country. The country beyond Shipki is called, by the Kanáwaris, Júng, by the Tartars, Galdang Paprang; beyond it is Kamling, and then Gehna.

Latsa is the residence of two officers of the Emperor of China, who receive the revenue; none of which goes to the grand Lama at Teshú Lombú; he is rather a priest than a raja or ruler, but in the former character he has great influence. Teshú Lombú is three months, and Latsa four months journey from Shipki.

In the evening we were much amused with a dance to which these people invited us. I say dance rather than nach, for to the latter it had not the slightest resemblance. On this occasion, the performers were all women, but the munshi who accompanied us, and who had before visited the place, told us the men frequently bore their part. They stood in a semicircle on one side of the room joining hands, and all singing in chorus, and kept time to their song, by swinging from one side to the other with one accord; there

was no motion of the feet, but merely the body was allowed to sway about, first from right to left, and then back from left to right. This was however pronounced by the munshi, to be a very tame exhibition to that in which both men and women joined; but as we had no opportunity of witnessing this kind of dance, our account of it would be but imperfect. On this and other occasions, we noticed the Tartar women to be much fairer than any we had before seen. They had also rosy complexions that might emulate those of Europe, and their countenances, though possessing all the peculiar features of that race, yet exhibited a variety of character and expression which is not to be seen in Hindustan. The women of the lower mountains possess it also, but in a less degree, no doubt owing to the mixture of Tartar blood.

From Namja, our next stage was Shipki, which we feared would be the limit to our travels in this quarter, although at Dabling and at Namja we were strongly assured that orders had been received to conduct us to Gáru. The road to Shipki was tolerably good, with the exception of one very steep and deep descent through a narrow defile, huge rocks, like buttresses or towers, overhanging the path. It is called Lakongma, and is immediately above a stream called Húpsang Túkbo, where travellers generally halt for refreshment; beyond this the ascent is severe, and continued as far as Shipki La, the highest part of the route. Here we had a view up the valley of the Setlej (which suddenly widens) for fifteen or twenty miles, the course from the eastward. No sharp granite peaks were to be seen in that direction, but bare round clay slate mountains, with here and there a slight trace of snow; no forest in any direction. From this point, the most northern the Setlej attains, the river bends off on each side. To the north on the right bank rises up a cluster of snowy peaks, the highest of which is called Púrkyúl; its elevation must be upwards of 21,000 feet. The descent to the village is easy; the whole distance from Namja is nine miles.

On our arrival, we found the people assembled to receive us; they formed

rather a motley groupe; some were bare-headed, some wore caps with flat crowns ornamented with fringe; some had tails which were plaited and descended to their heels; others had their hair close cut; some were dressed in the skin of the shawl goat, the wool inside; others had a coat of red woollen stuff, which they say is manufactured in the interior; almost all wore, what seemed to us, breeches and stockings; the latter it is true were more like bags. Their shoes were quite Chinese-like, those already noticed at Dabling with round soles, such as to us appeared to be a matter of no little skill to walk in. In the girdle we observed stuck a double flageolet, on which they play, but it may be supposed very rudely. A steel tobacco pipe, a bunch of keys of curious fashion, and a steel set in brass to light their pipe. One man, and one only had a sword, in shape and size much like that which the Madras jugglers swallow; they seemed in general a good natured looking people, though not what would be called good-looking; yet some of them had very expressive countenances. We observed a great deficiency of beard, though it was not totally wanting, except in a very few, and these had such smooth faces that we mistook them for women; none of them had much, and we, as well as our Musselman servants, derived not a little credit from our superiority in this respect. The most remarkable feature about them was their excessive filth, to which we had seen nothing equal. As we were a little fatigued and rather hungry, we contented ourselves with this general survey, resolving the next day to satisfy our curiosity more fully.

Thermometer in the morning 33° 5′, a cold climate. We were now upon the threshold of the celestial empire, and though in part prepared for Tartar features and other peculiarities, we still found much that was new and striking. The appearance of the place itself is singular in the extreme. To the westward rises a ridge covered with snow, and having an elevation of $22\frac{1}{2}°$; several lofty peaks crown this ridge and these were entirely capped with snow. It extends round in a semicircle to the southward, from which it gradually falls off, and is finally lost in the lower and roundish clay slate mountains which are seen to the eastward. In this direc-

tion the view was open for fifteen or twenty miles, to which distance the Setlej was visible. No villages however "embosomed soft in trees," were there; no forests, not even a bush, broke the uniformity of the bare and brown acclivity which rose from the water's edge to heights of 18 and 19,000 feet. To the north was the high peak Púrkyúl, belonging to the ridge which separates the two branches of the Setlej. Here all was rock, bare and steep precipices, with very little snow. This high ground, as far as we could judge, continued up to the north, so that we saw it endwise, and consequently only one or two peaks belonging to it. The village, consisting of six scattered hamlets, is spread out on the flat declivity of the first noticed ridge, which, from the top to the very bottom, appears to be but one uniform scene of rocky barrenness, except where the industry of these people has fixed a few hardy productions, and, with not a little labor, brought some level patches into cultivation. A hedge of gooseberry bushes surrounded the fields in which we were encamped. A row of willows or oziers, which in the day afforded shade to our followers, were the only trees. In front of our tents ran a clear and rapid rivulet, at which might be seen drinking the bushy-tailed yak; at our door lay a flock of Tartar sheep, unrivalled for size and beauty as for fineness of wool. The shawl goat also was there, and the Tartar dog, having like the goat a fine wool under his coat of hair. The picture was completed by an assemblage of Hindustanis, Kanáwaris, and Tartars, seated in groups; the contrast of whose dresses was scarcely less striking than that of their features and of their speech.

On enquiring into the truth of the report of orders having arrived to conduct us to Gáru, it proved (as I had conjectured) to have no foundation; the people were however very civil, and the Seyana offered us a Nezzer of one day's provisions for all our followers. He agreed at the same time to furnish as much more as we might require at a reasonable rate: firewood, (which we supposed would prove a great difficulty,) was also furnished in abundance. When however we talked on the subject of our being allowed to proceed onward, they expressed great unwillingness to admit it;

after much debate, they declared that, though averse to our attempting such a measure without permission from the interior, yet they would not oppose our progress if we chose to insist upon it. They however proposed, that we should write to the Deba at Gáru, and halt five days for his answer; that during those five days they would furnish us with provisions gratis, if we chose to decline paying for them, and that we should be bound by the answer either to proceed or return. To this proposal we willingly agreed, and two letters were written to the Deba requesting an interview, and offering some presents. This letter was immediately dispatched by express. We were given to understand it would be conveyed by horsemen, reliefs of whom, were stationed at each village.

This discussion had assembled the whole village in or about our tents, and we took advantage of the opportunity to put a few questions to them. Bali Ram Seyana, of Namja, was our interpreter, and he was assisted by a munshi who understood a little of the Tartar language; they were so exceedingly curious however themselves as to all they saw about us, that they would much rather have asked us questions than answered those we put to them. Amongst other things we learned the following particulars; Gáru is the grand mart where the productions of Hindustan, of China, and of Ladak, are collected. There is no town, the people living in tents. There are two stations, the Winter and the Summer, which are two days journey distant for a horseman; the distance occupies seven or eight days on foot. The Deba alone has a house, but he has also his tent pitched on the top of it; it is made of coarse cotton cloth, as are also those of the principal Beapáris, but those of the Tartar Goatherds are formed of a blackish stuff, manufactured from the hair of the yak. At Gáru, little shawl wool is produced, but beyond Mansarower the flocks are numerous. Tangshúng and Meyshúng are the names of the places from which the greatest quantity is to be had. It is all brought in the first instance to Gáru, whence the Ladak traders carry it away to Cashmir. It appears that an arrangement has always subsisted between the Latakis and the officer at

Gáru, or rather between the two governments, for the Deba is relieved every seven years. The name of the present Deba is Karma Namdyang.

Leh or Le is the capital of Ladak. It is fifteen or sixteen days journey from Gáru, although on horseback it may be performed in five or six days. From Skalkar in Hangarang there is a nearer road which leads through the purgunnah of Spiti in Ladak. Leh is situated about north from Shipki, Gáru about east.

In the afternoon we proceeded to look at the river, the distance of which was one mile and a half in a northerly direction. It is not fordable ; the depth being about six feet and the current rapid ; the width is sixty-seven feet. There is a jhúla, or suspension bridge, formed of ozier twigs ; it measures 115 feet between the points of support. The descent was latterly steep and we found the difference of level as determined from boiling water 1056 feet, so that the river bed here has an elevation of 9107 feet above the sea.

Thermometer as yesterday 33° 5′. A Tartar Beapári was introduced to us to-day who spoke Hindustani, and in conversing with whom therefore we had no occasion for an interpreter. He was of Maryúm, a village four days journey beyond Mansarowar, his name Chang Ring Jing. Mansarowar, he told us, is a snowy range ; the lake being called Matalae, but this must have been a mistake, as Sarowar signifies the same as Talae. However I mention it as it may serve to throw light on the story of the Dabling Lama as to four rivers originating there. This man then who was born and has lived so near the place in question, says that no river originates in the lake, but that from Mansarowar, which he calls a cluster of snowy peaks, proceed four rivers : 1. Lang Jing (Setlej) to west and south ; 2. Tamjok to the west and north ; 3. Sing Jing (Indus) to Ladak between the two preceding ; and 4. Mamjo or Mamjok opposite the preceding towards Gerhwal. The Spiti river, or right branch of the Setlej, he says, rises about eight or nine days journey from its confluence with the left branch.

The Tartar shepherds do not live in villages but in tents; they lead a wandering life, removing from place to place, as the pasturage is consumed. At two year's old the wool is in greatest quantity and perfection, and the rams furnish the best. Lok and Mamo are the names of the ram and ewe, and the wool is called pul or pal, but in this quarter it is termed Changbal, and the mountaineers call it Byangí ún. What the origin of this term byangí is I could not find. The shawl wool is called Lena: by the mountaineers Pashm. Rabo is the name of the male, Rama of the female. At Gáru, both shawl and byangí wool is collected, and the traders of every quarter visit that place to obtain some; a fair is held during sixteen days, in the month of May. It is called Doa or Dawa Dúmba. The Latakís take the chief quantity of shawl wool, and give in return shawls and specie (Rupees and Timashis;) they also carry away broad cloth. From the mountaineers they take grain and raisins, and receive in return byangí wool, salt, borax, and a very small quantity of shawl wool.

The districts most famous for shawl wool are, Lodok, Mahjan, Tang Shúng, Meshúng, and Changtaling. The following sketch, of the relative positions of the principal points of communication with the traders, is furnished by this man.

Chamba is a considerable mart for shawl wool, and it appears that they obtain it from the Latakís through Lahu. Núrpúr is six day's journey from Belaspur, Jwálá Mukhi four day's from Núrpúr; at this place is a burning well; the water itself is cold, but there is a flame on the surface. There is a temple and lodging for sixty Gosains who live there. From Jwálá Mukhi to Kote Kangra is one day's journey, and to Rüalsir, five; from Rüalsir to Mandi is one; from Mandi to Suket one, and from Suket to Rampur, six or seven days. From Gertop to Leh is a journey of twenty days; the distance from Shipki has been already given, and from Shipki to Rampur occupied us in returning about fifteen days; from these some general idea may be formed of the distances.

From Shipki to Cháprang is but five days' journey ; it is on the left bank of the Setlej. There is a fort above the town, which is commanded by a Zumpung ; he is said to be a native of Mahá Chin, and is much fairer than the Tartars, though not so fair our informant said as we. The fort is of stone, and is capable of containing 1500 or 2000 men ; the road is excellent and a horseman might reach it in three days from Shipki. One high peak only, called Sherung La, is crossed, on which lies a good deal of snow. About two or three miles beyond Cháprang is Ling. The road to Gáru from Shipki, is as far as Shangze, the same as the preceding ; at that place it breaks off. At Gáru resides a Gárpan, or governor.

From Gáru to Mansarowar is eight day's journey. Kangrí,* is the name of the peak from which the four rivers before noticed rise. Chankpa, is the name of the peak giving rise to the Jahnavi river. It is three day's journey west of Mansarowar. The Ling Jing flows to the north of Leh.

Thermometer 35°. A few more particulars were collected from our friend Chang Ring Jing. Gáru, he says, is visited by a race of men called Yarken, who come from a country distant one month's journey. Their dress he describes as similar to that of a munshi who was with us, and to be made of stuffed cotton cloth ; they wear large caps lined with cloth and covered with silk ; these are like their garments stuffed with cotton. By the Gáru people they are called Hor, but by the mountaineers from Kanáwer and Gerhwal, Yarken. They live in villages, and are subject to China ; they eat mare's milk formed into cakes ; they are large men, of a reddish complexion, and have broad faces with little or no beard. The direction of their country from Ladak is north ; their breed of horses is remarkable for size ; they bring ingots of gold and silver, leather of a brown colour ; also the yellow fringe which these people wear attached to their caps. They receive in return red leather, (goat and sheep skins ;) rice from Chamba and Súket.

* Mr. Moorcroft mentions a valley of this name, or rather Gangri, but no peak.

Har, a drug, the fruit of a tree, which is found in both the mountains and plains, with some other articles which our informant did not recollect; they do not take any Pashm. This country is without doubt, that of which Yarkand is the capital, and the brown leather is very probably from Russia.

Sambhunáth is two month's journey from Maryúm, his native village. The first half of the road is along a plain; the last half mountainous; several high ranges are crossed, and on descending from Tage La, (La meaning pass,) the first village of Nepal called Kerúng is met with. Maryúm from Mansarowar is five days. It is small, and contains but eight or nine houses.

Adverting to the rounded form and inferior elevation of the mountains to the eastward, I thought it extremely likely that by ascending the snowy ridge to the S. W. I might be able to catch a distant view of the Table Land, and even succeed in observing its depression which would fix, within certain limits, this so much disputed level: the ascent was very steep towards the top; little snow lay on it where I ascended, but to the southward it rose considerably and there the snow covered it. In my ascent I disturbed numberless covies of Chacors, and even some Munals or golden Pheasants. The ascent occupied me four hours, and fatigued as I was, I rushed up the last hundred paces, thinking to see the promised land, but I was disappointed. From 62° to 90° extended a chain of mountains of smooth rounded form, bare of forest or snow, and clothed with a withered or russet vegetation, but nothing like a Table Land or plain, or even valley of any extent; the lowest of these mountains had an elevation of 13′; this mountain bore 116° or 26° S. of E. To the north, appeared a cluster of irregular peaks sharp, bare and rocky, but scarcely rising above the limit of snow; the waters of the Setlej were visible for several miles; the depression was at the furthermost visible point 8° and the bearing 85° or 5° N. of E; it seemed as far as I was able to judge, from the run of the mountains, to bend round from the southward.

On the evening of the 20th, we heard an account of our Gáru letter which gave us little hope of being allowed to proceed, and as the season was now far advanced, we began to fear we should have little time to take advantage of the permission, even if it should be granted us. The letter had been delivered to the Kardar of the Zumpung of Cháprang who was at Shangze, four days at least would elapse before the Garpang could send an answer, and by that time it would be a question how far we could penetrate before the necessity of return should arise. This being the case, and our hope of obtaining such permission extremely slender, we determined to prosecute our tour into Hangarang.

Shipki produces wheat, barley, and the grain called úd, which to me appears a species of barley, likewise chenna, but no other grain of the mountains. Turnips are a favorite crop, and with reason, for they were the finest we ever tasted; they are called Nyungma by the Tartars, and Shagher by the Kanáwaris. Wheat is sown in April.

A small trade is carried on between this place and the people of Kanáwer; salt and byangí wool is exchanged for several kinds of grain (including rice,) raisins, spirits, iron and specie. The greater part of the traders go beyond Shipki to Meyung, Stojo, and to Gáru, at the fair.

On the 21st we returned to Namja, and the following day crossed the Setlej and encamped at Tashigang, a small hamlet on the declivity of the Púrkyúl ridge; one mile of descent brought us to the river bed, where we crossed on a very good jhúla or bridge of ropes, which was constructed of twigs of ozier or sallow; it was ninety-nine feet in length, and thirty feet above the water. The river was here obstructed by large rocks, some of which were curiously honey-combed, and had many deep pools in them; it was not fordable. The ascent was most steep, and continued for three miles and a half from the river bed; the difference of level being about 3500 feet. We found the gooseberry here in great perfection, with several new fruits;

the elevation I suppose to be 10,177 feet. The snowy peak Púrkyúl is seen towering high above the village, its elevation 24°. The appearance of the mountain side at a distance, is that of a bare and precipitous waste; but on reaching it, we found a good deal of even ground; some fine pasturage as well as cultivation, and several ponies of a good appearance grazing about. Tashigang is in Túkba, and consequently in Kanáwer. There is a small temple built at the expense of the grand Lama.

We arrived about eleven o'clock, and as we had still Baliram, the Syana of Namja, with us, I made him give some account of the course and origin of the right branch of the Setlej. Beyond Skalkar, he said, whither we were now proceeding, was still another village belonging to Bissahir, called Súmra. Súmra is on the Spiti river, and from Súmra to Larí, the first village of Ladak, is a short march; beyond Larí, about one or two and a half miles, he represented we should meet with Tabo, a small hamlet; then Pokso or Poh, and then the fort of Dankar. The river has at this place two branches, which unite under the fort; the left branch is called Lidang, and the right Spino, which is also the name of the next Purgunnah to Spiti. The following villages occur beyond Dankar, between the two branches, but on the Spino:—Tangtee, Kúng, Kúngrí, Kúlling, Salling, and Baro. Beyond this he said he had no certain information.

On the Lidang, again, which is about half the size of the Setlej, beyond Dankar, these villages are met with:—Lara, Paling, and Rangreh. The Lidang comes from a peak called Kungúm La, about fifty miles from Dankar. The Spino's source he did not know.

From Tashigang to Nako in Hangarang was a distance of ninety-four miles; the road rather rugged upon the whole, though there were few dangerous places. It lies along the face of the range of which Púrkyúl is the high peak; three miles from Tashigang, the valley of the Setlej was left, and we turned up that of the Spiti. This is the highest part of the route,

and to it the path is a continued ascent; the elevation I calculated to be about 11,815 feet, judging from the boiling point. The path improves after rounding the corner, and the appearance of the mountains alters still more. The granitic and high sharp peaks give way to low rounded mountains, with scarcely any snow on them, and still less vegetation; nothing can equal the complete nakedness of this Purgunnah of Hangarang, and it is a wonder how the people contrive to support themselves. Nako contains about thirty houses, and is situated on the western declivity of the Púrkyúl mountain; there are a few apricot trees, poplars and oziers, and barley and wheat, are grown still higher than the village, though its elevation be nearly 12,000 feet.

We noticed a curious appearance in this day's march, which we had afterwards occasion to observe, was very common in this part of the country. It was a conformation of ice, having all the regularity of a vegetable production; it seems to grow from the stalk of a particular plant and from no other, it is fantastically disposed in leaves having various whirls or twists. The leaves as they may be called have a fibrous appearance, but grow (contrary to the habit of real leaves) perpendicularly from the stem, like a pendant on its staff. We observed a great number of these glacial plants, (if they may be so called,) but whence the moisture came is difficult to say, for the ground was gravelly and arid. It is equally difficult to account for the ice assuming that particular form, and growing so as to raise itself several inches above the ground. It may be worth remarking that in every instance, the plant to which it attaches itself, and which is a small leafy shrub, was withered and sear.

The thermometer was in the morning 23° and all the water in our vessels was frozen nearly an inch thick, even inside the tent. From Nako to Chang was a distance of one hundred and five miles; the path is good the whole way, and the ascent which continues the first half, and descent from thence to Chang, are both easy; several flats and hollows are seen in

the vicinity of Nako, and close to the village there is a small lake of considerable depth. The declivity of the ridge is here very gentle, though on the opposite side of the river the steepness is established by the appearance of the road not leading along its face, but over the lateral ridges and descending into the glens. At Chang there is the same flat declivity ; on this side, red hard earth is seen to form hillocks that rise above the surrounding terrein, similar to turrets or the bastions of a fort. Chang is situated in the middle of a little flat, which might be almost called a valley ; it is in some measure, or has been, the bed of a torrent, but the stream now flows deep below and far away to the right. To the left this valley is bounded by a ridge of the hard clay, I have already mentioned, which separated it from the collection of hillocks. Looking up in the direction of the glen, which has a very gradual acclivity, and flat and retiring sides, the granitic peaks with snow on them are again seen, but of an inferior elevation. The village is rather large and like all those in Hangarang perfectly Tartar. The contrast in appearance and language between this race and the Kanáwaris, was made more striking by the arrival of a man belonging to Púrbúnní in Kanáwer, from Ladak, while we were here. He had come from Leh to Larí, a village two or three marches ahead, in fifteen days, and he informed us that Runjeet Sinh had established a Wakil at Leh, and that the country was considered subject to him, in the same manner as it had before been to Cashmir.

The appearance of this Purgunnah Hangarang, is most strange and melancholy : mountains bare of forest, but above covered with a little snow, of the rounded form, with gentle declivities, but broken towards the river into abrupt and precipitous abysses ; in the beds of which where fed by a stream, are seen a few trees, chiefly the ozier. The rocks, though still a good deal granitic, and felspar common, yet are verging into clay slate of which there is much about this village ; above Nako, the ridge is of the true Himalaya form, rugged and precipitous, breaking into pinnacles and crags, but bare even of the brown and scanty vegetation that in some measure

clothes the nakedness of these. A furious wind seems to reign here; it blows from about ten till three or four o'clock, when it lulls, but of its force it is difficult to give an idea; in steadiness I may compare it to the hot wind of the plains. A road was pointed out to us, which they said leads to Gáru; the distance a journey of twenty-two days. The road is passable for horses, though not very good.

There is also a road hence to Rúpsho, five day's journey, of about eight or nine miles each. From Rúpsho, Rútoh is twenty day's journey, and Leh ten; from Skalkar represented to be a few miles ahead, Larí is two day's journey, and Dankar fort, five.

Thermometer 26°. To Skalkar fort was only a distance of four miles; the path leading along the river edge, which is here unobstructed by large rocks and has rather a temperate current; we crossed it on a sanga, boarded and railed, but rather rickety; the length of it being ninety-eight feet, and the height above the water twenty-seven. The fort is on the edge of the bank, and may be said to overhang the river; it is built of stone and is small, but from its situation capable of being well defended. One of the Wazirs (as they are called) of Bissahir, lives here part of the year. It was considered by these people a very important post previously to our conquest of the mountains, and it appears that they have had frequent contests with the Latakís for the possession of it. Indeed it occurs to me that all Hangarang must have been formerly a part of Ladak, and wrested from the rajah of that country by the Bissahir government. The separation of the two districts is so decided, and the line which marks it so strong, while from Hangarang to Ladak no difference is perceptible, that I cannot but believe the Hangarang pass was formerly the boundary of Bissahir.

We had now reached the thirty-second degree of latitude, and had left the true Himalaya far to the southward, while a new country of entirely a different aspect lay before us. To proceed still further was of course our most

anxious wish, and it was strengthened by the appearance of the roads, which from Nako had been excellent, and in front seemed still better. Indeed we had been uniformly assured that they were passable for horses and that no difficulty whatever would occur on this head ; but difficulties of a different kind, and less easy to be surmounted, presented themselves in the jealousy of a strange people who owed us no allegiance, and our own want of preparation for such an attempt. The season, too, was far advanced, and it was known that in several parts of Kanáwer snow might be expected to fall daily. The apprehension that we should find some of the passes shut, and the uncertainty under which we laboured as to our being able finally to reach any point where we could winter, induced us at last, however unwillingly, to resolve on returning. The difficulty, too, which we felt on account of provisions, was an additional inducement; and it was determined that my companion should halt the next day, and on the following, commence his return, while I, with a very few followers, should push on to the first Lataki village, from which I hoped by forced marches to overtake him. Lari was represented to be two marches, Súmra being the first, but the road was said to be good, and I thought it desirable to make the attempt, if it were only for the sake of fixing the extent of the frontier. It was determined that my companion should return down the right bank, in which route I was to follow him: we should thus have an opportunity of seeing the whole of Hangarang, as well as some parts of Kanáwer we had not before visited. The latitude of our camp here was 32° 0′ 2″, the elevation 10,113 feet. The river was 441 feet below.

Thermometer 29°. A little after day break I left Skalkar, accompanied by a servant, six carriers, and a guide ; a long and laborious ascent, in which however the path was excellent, brought us to the Lipcha pass, a ridge having an elevation of 3123 feet above Skalkar, which I have as above supposed to be 10,113 feet above the level of the sea. So great was the cold, that, at ten o'clock, the ink froze. We had, from this pass, a view

of a part of the river's course which appeared to have here a considerable bend, coming, not from the north as I had supposed, but, from the west. The view also extended up the bed of the Yang Cham river, which joins the Spiti immediately at the turn. It seemed to have a great fall, and to be rather a rapid torrent than a river. On the opposite side of the Spiti, appeared an excellent road, which, I was told, was that leading by Chimarti to Lari, and I resolved to return by it, as it seemed to have fewer inequalities than the one I had chosen. There were no peaks of superior elevation seen in any direction, but the southern; to the east, was seen a continuation of the Púrkyúl chain gradually falling off, and with little snow on it. To the north, the left bank of the river rose into round clay slate ridges, which here and there shewed a solitary peak and some little snow. To the west, were seen black bare mountains too low to retain snow. In fact, it appeared to me, that the great chain of the Himalaya was to the south, and that, in this direction, the falling off had already commenced.

From the pass, the descent was steep at first, afterwards more easy, the path always good, though I think scarcely passable by mounted travellers: after descending to the river bed, it leads along the water edge, sometimes cut out of precipitous crags in the form of a ledge, sometimes supported by scaffolding. This description, however, applies to but a very short distance, and after passing it, the road is again excellent. I arrived at Súmra about half past four o'clock; it is a small village, situated in rather an extensive flat or table land, the foot of which is washed by the river. On enquiring the distance to Lari, I began to think I might reach it with some exertion by night fall, but I learned with considerable mortification that it was on the other side of the river, and that there was neither jhula nor sanga to cross by. On questioning them as to its being fordable, they said it might be, but that the current was too strong, and the water too cold for me to attempt it. My wish however to gain a day urged me to make the attempt, and, with the support of two muscular Tartars, I forded the Spiti river. What made it not a little dangerous was a rapid about one hundred yards below the

ford, and by which, had the footing been lost, one must have been dashed to pieces. The water was a little more than middle-deep, the current strong though not rapid, the width about one hundred feet or more; the round smooth stones which formed the bottom were the chief difficulty, as they afforded no secure footing. The temperature of the water was so low, that I found my limbs quite benumbed, and it was some minutes before they recovered their feeling. With some little delay, my few followers got all across, and we then found an excellent road the whole way to Lari. It lay sometimes in the river bed, and sometimes along a flat in which the river had cut its channel deep and far to the left. The mountains entirely clay slate, and exhibiting in many places, a declivity of the most undeviating regularity, formed of loose fragments, which rolling from above had all taken the station assigned to them by gravity. We reached Lari by dark, and were furnished by the hospitality of the people with a house to shelter and firewood to warm us. The distance from Skalkar was seventeen miles, of two thousand paces each.

This village is situated at the southern foot of the ridge, which rises from the narrow plain or valley I have already described, and the width of which here is about one-third of a mile. The white houses of the small hamlet of Tabo are seen about one mile and a half farther up. The cultivation extends the whole breadth of this valley, that is from the village to the river, but not far above or below. The river runs in a channel about 120 feet below this level piece, and from the immediate bed, the mountain ridge on the opposite side rises. I have already described the appearance of these chains, equally bare of snow and of forest, and occasionally having their irregular declivities concealed by the beds of loose fragments that lie against their sides. Here and there, within their recesses, a dry and withered turf affords a scanty and precarious subsistence to cattle, but neither bush nor bramble, leaf nor herb, offers a relief to the eye, fatigued in contemplating the same unvarying bareness. Lari is, in this quarter,

the first village of Ladak. It is small, consisting of not more than eight or ten families; the houses are built of unburnt bricks; such is the extreme dryness of the climate. In fact, scarcely any rain falls; in May and June, a very little, but during the rest of the year the heavens yield only snow; vapour or dew must be totally unknown under a temperature generally below the freezing point.

The shawl goat is said to be bred here. I saw none however, and I rather suspect from their answers to my cross examination, that they were imposing on me. Certainly they are not to be seen in any village to the southward of this, nor has the Bissahir government, however anxious, been yet able to introduce the breed either into Kanáwer or Hangarang. Spiti is the name of the Purgunnah which extends to the Losar village, and Spino is the next Purgunnah. At Dankar, which is a fort, beneath which the two branches of the Spiti river unite, a Kamdar resides, to whom they pay their assessment. Dankar is about thirteen miles from Lari, and in a westerly direction. The left branch of the Spiti is the larger, and comes from the Purgunnah of Spino; the other has its origin near Lossar or Losar; they had not heard they said of the establishment of the Sikh authority; they had never been at Leh, nor did they know how far it was from Lari; they shewed considerable disinclination to answer any of my questions, and their answers were not satisfactory by any means.

I left Lari early in the morning on my return, and got to Súmra by nine o'clock. In fording the river, which I attempted without any assistance, I was very near being carried away by the current, having slipped in placing my foot on one of the large smooth stones with which the bottom was covered. The temperature of the water I found to be 36° 3′. By evening I arrived at Skalkar, where I found my companion had marched for Lïo. I put up in one of the huts, which I found empty, and attempted to defend myself from the cold by lighting a fire, but the annoyance of the smoke made the remedy as bad as the evil.

From Skalkar, Lïo was represented to be a very long march, and the road extremely bad in places, but as I thought I should most probably find the encampment there, I set out early, intending, if possible, to reach it by night fall. The path gradually ascends, for five and three quarter miles, to Chejang Kanka, a pass over one of the lateral ridges which shut in the numerous streams that feed the river. These ridges are all of great height, or rather the beds of the streams are of great depth, and to cross even one of them is nearly the labour of a day; the summit of this pass is a level piece of some extent, and we found some huts and an attempt at cultivation. As it was now noon, I halted to allow the people to take advantage of the spring we found, and make a meal before they attempted the arduous task in front; the descent to, and ascent from, the Yulling river. The steepness of the opposite bank, and great height, seemed to defy all access to it, but the rear of my companion's line of march, which was now perceived slowly ascending it, proved that it was to be surmounted, and gave us hopes of overtaking them before evening. At half past one we proceeded down a most steep and difficult declivity, in which the beds of loose fragments lying at a considerable declivity, afforded a footing as insecure as it was tiresome. A little above the bed of the stream, we passed through some more even ground, which appeared to be cultivated, though at this time there were no crops. The stream is rather large, and occasioned a little delay in fording it: it has its source to the westward from some lofty peaks that were partially seen, looking up the valley. At the place we crossed, a small rivulet joins it, which issues from a rocky cavern in a very picturesque cascade. The waters of this fountain are so strongly impregnated with calcareous matter, as to deposit it on every thing it touches, and the cave is ornamented with stalactites, something similarly to that in the Dún called Sansár Dhárá, though it yields to this latter in the number, size, and beauty of them. The rocks in the bed of the river are limestone, and the steep scarp which we had now to ascend appeared to be composed of calcareous earth, of that description found in the plains, called Konkar. Notwithstanding the evidence I had had of this pass being surmountable, when I

came to ascend it, I could scarcely persuade myself that what I had seen was real. In describing the difficulties which a journey through these countries presents, it is not easy to adhere to a just discrimination to give an estimate as it were of the proportional dangers of each difficulty. Even the least rugged of these strange and uncouth scenes, to give a correct idea of it, almost exhausts language. Epithet is heaped on epithet till at length no stores are left to paint the succeeding scene, which rises still higher in the scale of picturesque horror and danger. The continual recurrence, too, of these descriptions, necessarily having a tiresome sameness, takes from the effect. Where all is rugged, a savage feature strikes the less, and thus the greatest difficulties as coming last are thought the least of. I have so often attempted in vain to give an accurate idea of any of these places, that I shall content myself with indicating the observed depression of the ford from the summit, 35°; the difference of level about 1480 feet; the nature of the path a hard and dry earth covered with small fragments of gravel, narrow and open to the left; neither tree, nor bush, nor herb, nor blade of grass, from the summit to the very foot, not even a ledge of rock to check one's fall, but a smooth undeviating declivity, down which we feared every moment to be precipitated, from the narrow ledge that served for a path, and along which it appeared at first impossible to proceed without losing one's footing. In a few words, this was by far the greatest difficulty we had yet encountered, and I am not ashamed to confess that I felt very considerable alarm in ascending it. From the pass, the descent is at first easy, latterly more steep to Lio, a large village situated on an extensive flat at the junction of the Lipak stream with the river. A good deal of cultivation was observed all round the village, and many apricot trees; the whole distance was about fifteen miles. I arrived just at dark, happy to fall in with my tents and people, after even three day's separation.

We had now before us a fairer prospect, and it was with pleasure we heard horses recommended to us for the next stage. We did not accept the offer, but many of our servants mounted themselves; some on ponies,

and some on yaks. The reality did not disappoint the ideas we had formed of the road, it was with very little exception level, and without any exception good, the whole way to Hang, a distance of nearly nine miles. A little beyond Lio, the river valley is quitted, to turn up that of a considerable feeder. The declivities had here a gentler slope, and we were pleased in this march to fall in with a herd of ponies, mules, and asses, grazing on the mountain side; they appeared strong and hardy, particularly the mules; Chulling we passed half-way; it is situated on the right bank of the stream in the bed, or a very little above it. Hang consists of three hamlets or more, the principal of which contains about twelve or fifteen houses. A temple of great sanctity in the opinion of the people, distinguishes this village; it is a large building, and something similar to those of the plains; a strange and mis-shapen red idol is the chief deity of the place; but behind this image, on a kind of altar, or railed platform, are a number of other gods and goddesses, chiefly small figures of copper or bronze; the walls are painted with the most ridiculous and monstrous figures as large as life; and, allowing for the peculiarities of their productions in this way, the artist seems to have been far from contemptible.

The name of this Purgunnah seems to be derived either from this village, or from some circumstance common to both. It is altogether Thibetian in features, dress, language, and customs, such as that of Polyandry, and the societies of Gelums or Monks; the construction of manis or the long benches of stones; and in religion, as the substitution of Lamas for the Brahmins of Kanáwer, the mode of getting through the duty of prayer by turning a cylinder, and the general reverence and devotion with which the mysterious expression, Om mani pad men Hoong, is pronounced. In salutation they incline their heads so as to touch; a ceremony which, assisted by the strangeness of their countenances and dress, has rather a ludicrous effect. There is no distinction of cast, and consequently no fear of defilement. They have no scruple as to food; the manner of preparing it, or the person by whom prepared. Ablution is so far from a duty as with the

Hindus, that it is a matter altogether dispensed with by these people, who have some excuse in the inhospitable nature of the climate. Whatever their national virtues may be, it is certain that cleanliness is not to be reckoned among them. Their women live under no restraint, but freely expose themselves to view, not even deeming it necessary to shroud the face in a veil or cloak. They have rather expressive though peculiar countenances, but their great charm is the ruddy complexion, which distinguishes them from the fairest born on this side of the snowy chain. They perform all the labours of agriculture, except those of ploughing and preparing the ground, and they are nearly as hardy and robust as the men. It is a pleasing sight to a European to see a troop of them going to fetch water from the spring, not in the Asiatic costume with an earthen pot on the head, and their face shrouded by a cloth; but in that of Europe, with ruddy cheerful countenances, unconcealed and unsuspicious, and a wooden pail under the arm. These pails are made of the juniper wood which is found in Kanáwer, though not in Hangarang, and which is in appearance and scent not unlike the American cedar: they are made chiefly at a place called Ropa.

Hangarang produces wheat, barley, öa, pápar, and turnips, but no rice, not even the kind peculiar to high and dry situations. There is but one season; the trees, which are stunted, are only to be seen near the villages or in the beds of streams; they consist of a few apricots and willows, dog-rose, gooseberry, a species of currant, a thorny bush known at home by the name of whin, and two species of shrubs not familiar to me, which produce excellent fruits, the one yellow and acid about the size of a currant, the other red and mawkishly sweet. It contains nine villages, the revenue of which is but 900 Rupees a year; a small trade is carried on with Ladak and Gertop, to both which places there are good roads. From the latter place they bring salt and byangí wool, but no shawl wool, which seems to be all reserved for the Ladak market. From Ladak they bring Pashminas and other manufactures of the shawl wool, but the raw material appears to

be contraband, as the greatest precautions are taken to prevent its being exported. A kind of coarse flannel or blanket stuff is manufactured here and at Chang, probably at all the other villages, but it seems to be in no great quantity. Ponies and mules constitute a great part of their wealth. Upon the whole, the purgunnah though barren and naked, poor and thinly inhabited, is no doubt capable of being made something of. It is principally perhaps to be valued as the door of a communication which might be opened with the Latakis and other Tartar tribes.

Our experience of the preceding day's march, and of the ease and quickness with which our mounted followers got on, induced us to accept the offer of two good ponies which was made us here. Mounted on them, we soon reached the summit of the Hangarang pass; an elevation which coincides with the limit of snow, and which is at the distance of about three miles and three quarters from the village. The thermometer at twelve o'clock, in the shade, and defended from the wind, stood at 34°. Hence we had an extensive view; the snowy peaks, Ralding and Zungling, were both visible.

The summit of this pass, which is 14,412 feet above the sea, consists of limestone. This probably is the outgoing of the strata seen in the bed of the Yulling river. It is the only instance in which I have seen limestone at this great height within the circuit of these mountains.

From the pass, the first two miles and a half is very steep descent to a stream, which at one o'clock we found almost entirely frozen. To Sungnam, the remainder of the road is good, the path leading along the bed of this stream which joins the Rushkalang below the village. The whole distance was 103 miles: we found here the principal part of our baggage, which we had ordered back from Dabling in our expectation of being permitted to proceed to Gáru. As this village was large, and there was no

deficiency of supplies, and as we had been making rather severe marches; we thought proper to give the people a halt.

The Hangarang pass is the boundary of that purgunnah, and in descending from it, we could not but observe how much even the separation of a single ridge can alter the general face and appearance of a country. The naked arid barrenness of Hangarang, was here exchanged for the green and lively picture of a forest of deodars, juniper and walnut trees. The difference was further perceptible in the luxuriant vineyards; the produce of which was presented to us on our arrival, and the advantage of two crops in the year places it in a still clearer light. Wheat, öa, barley, chenna, pápar, ougal, and turnips, are produced; the three last following barley, but wheat and chenna exhaust the soil. Wheat is sown in March, and cut in July.

Sungnam is one of the largest villages in Kanáwer; it cannot contain, I think, less than eighty families. The people are all traders, like the rest of the Kanáweris. Wool they import from Gáru, which they manufacture into Suklath or Sanklath, Doru, pankhis, and caps. Besides wool, they import salt from Gáru; their exports are wooden dishes, iron, horse shoes, tobacco, grain, and raisins. The tobacco and iron they receive from Rampur, with specie also, in exchange for their woollen stuffs.

This village is in Süa or Süang, one of the sub-divisions of Kanáwer. It is situated on the left bank of the Rashkalang, a considerable stream which joins the Setlej below Chasu; there are also the villages of Gabún, Taling, Chasu and Rupa; the two first are on the right bank, the two last on the left. The source of the river is in the high range called Damak Shú, which separates Kanáwer from Ladak. On this side of the range, Rupa is the last village met with, and on the other side Manes, a village of Ladak, is the first which occurs: from Manes to Dankar, is three day's

journey. This road however is not so good as that by Skalkar and Lari, which is a journey of eighteen days.

We were a little dismayed in the morning, by the appearance of a servant reporting that it had been snowing heavily all night, and had not yet cleared up. On looking about us we found it was but too true, and that the snow lay about half a cubit deep all round our tents, while the surrounding ridges and peaks had all exchanged their hue of green for the more dazzling, though not so pleasing, livery of winter. This was quite an unexpected event to us, though the probability of it had been frequently foretold, but we always attributed their introduction of such topics to their anxiety to see us fairly returning. We were a good deal perplexed, not knowing when it might clear up, particularly as we found there was no low road to Kanam by which the danger of travelling over new snow, should there be a heavy fall, could be avoided. Most fortunately it cleared up about ten o'clock, and the sun then breaking out, soon caused what had fallen to disappear, except on the highest ridges. The thermometer was at 31° during the fall. We immediately determined on taking advantage of this turn in our favour, however distant the probability of reaching Kanam by night fall. The great object, now the winter had evidently set in, was to get beyond the high ridge separating these two villages, after which we should have no very high ground to traverse, and should consequently be more independent of changes in the weather.

The path leads down the Rushkalang for four miles, an easy descent and generally good, it then crosses the river on a sanga, thirty-three feet long and twenty-five above the stream. The ascent of the pass commences immediately from the bridge, and continues most steep to the summit, a distance of three miles. We found a few patches of snow near the summit, soft, but of no depth. The thermometer was 32° and it had begun to snow lightly during the last few hundred paces; however, we had the satisfac-

tion to see before us a good road, on which we might use the ponies we had brought with us. We reached Kanam by dark, in a heavy fall of snow, which had gradually increased from the pass: our followers did not come up till late at night. The distance was thirteen miles and a quarter.

From Kanam to Jangí was a distance of ten miles. The road good to the commencement of the descent to the Changti nala, which is certainly equal in danger and difficulty, to any thing we had met with. A mile of most steep and rugged descent, in which the nakedness of a rocky scarp was ill exchanged for a hard and slippery gravel, was finished by a regular flight of steps, that led into the bed of the nala. We crossed it on a sanga, not a little pleased we had left behind us this frightful precipice. There are two villages, Osárang and Lipta, higher up this glen, and a road leads by the latter from Kanam by which this last dangerous and difficult descent is avoided: from the Changti nala to Jangí, is easy and moderate ascent; the people of this village trade with Pateala and Ladak; from the former place they import indigo, sal-ammoniac, baftas and spices; from the latter saffron which they call kesarí; ingots of silver, and palhís or timashis of which eight make a sicca rupee. Wool they receive from Gáru, and salt from Hangarang and Gáru.

From Jangí our next march was Rarang, a distance of nine miles; the whole of the way a good path with very little descent or ascent. We had now got back to the region of forest, and the noble pines through which our route lay, at once gave the scenery its principal charm, and afforded us the real advantage of shade. We passed the confluence of the Tedúng, a river before noticed as crossed on the way up. We now learned there was a road up its bed leading to Bekar, and a small hamlet on one of its banks, a day's journey from the Setlej. We passed Rispa also, and Reiba; in the latter, admiring the display of grapes laid out to dry, and with which every house in the village was covered; at Rarang we found the Neoza in great quantities, and of an excellent flavour; the price was ten seers for the rupee. Walnuts also we found very good, but they had been brought from Pangi.

The weather was now extremely pleasant; the sun not too hot in the middle of the day to take exercise. In the morning the thermometer at this village was 31° 5′. The grapes had fully ripened, and we had baskets full offered to us at each village we passed through or halted at.

We proceeded to Pangi, a distance of ten miles; the path not so good as the preceding day's, though still not bad; six miles is of a mixed kind, to a stream crossed on a sanga, in the bed of which lies the road formerly noticed as leading from Kanam by Lipta and which crosses the Kasang pass. From this place there is a steep ascent of about three-fourths of a mile, through a deodar forest, in which we found a good deal of snow towards the summit. We overtook here a number of the Hangarang people, proceeding heavily laden to the Rampur fair. The remainder of the road was good and nearly level; the proper name of this village, which contains about thirteen families, is Thempi; there are several others close to and the whole collectively have the name of Pangi. We observed, over the door of a temple here, the hide and horns of a curious animal, which had been killed in hunting and which these people called Skin. There were also skins and horns of the War and Ther; they both go in herds; the former is something like the musk deer, the face is however that of a sheep; the hoofs are divided; the horns are more like those of a buffalo than any other animal. The Ther is supposed to be the Chamois of the Alps; it is called Sboo or Zboo by the Kanaweris. The musk deer (male) they call Robz, (the female) Bíz; numbers of them are shot all over Kanawer, particularly in this vicinity.

Half-way, or rather a little more, we breakfasted at Chani, a middling village opposite Barang nearly. We passed through Kashbir and left towards the river side the several hamlets of Dún, Brehle, Yuäring, Sonan, Kúti, Kangi and Fehling. On this side of the river the declivities of the mountains are more gradual, and in consequence not so bare; for this reason also the villages are more numerous and the cultivation more extensive.

As far as Chani, and even for some distance beyond it, the path had been good, generally speaking; between it and Rogí, however, there are one or two exceptions. The pass called Maning Chi, in particular, is a very rugged looking place, and the path leads along the face of a precipice at a great height above the bed of the river. Several flights of steps, constructed with loose stones and scaffoldings boarded, one of thirty feet in length, render the place passable, which it otherwise would not be. From the summit of this defile is seen a noble view, the principle feature of which is the Raldang Cluster of snowy peaks, which rise above Murang not above ten miles distant. The Harang ridge, which we had crossed in the march from Sangla to Mebar, was observed to be covered with snow to a considerable depth below the pass over it. To the south we saw the inner ridge of the Himalaya, in which are the Ganas, Bruang and Role passes. The main ridge is certainly marked by the Raldang Cluster, and the Setlej may be said to break through it at Murang or below. The latitude of Rogí is 31° 30′ 13″. The elevation 8551 feet.

Rogí, I consider the southernmost village where the true costume of Kanáwer is to be observed; even there the people are very inferior in all that constitutes the peculiar appearance of the Kanáweris. They are much darker, and not so good looking, and their language is sensibly mixed with the mountain dialect of Hindustani. At Sungnam, Kanam and Raba, the features which distinguish them alike from Tartars and the mountaineers south of the Himalaya are most strongly marked. Kanáwer however as a purgunnah extends much farther down the Setlej. Between Rogí and Meru that river changes its course from a southerly to a westerly one; at the turn it receives the Baspa river, and above the confluence is the village of Bruä or Bruang, from which there is a route by the pass of the same name over the snowy ridge into Chuara.

From Meru to Spara Wodar, an open spot in the bed of the river where we encamped, was a distance of nearly thirteen miles. At Chegaon, rather a

substantial village about half-way, we stopped to breakfast, and admired a handsome temple with its gilt spire. From Chegaon the descent continues, and becomes rather difficult and even dangerous just before leading to the river bed; the path then continues along the level flat a few feet above the river. On the opposite side we noticed the Melang Glen far retired within the snowy range; a considerable stream which waters it joins the Setlej; a pass leads up the bed of it into Chuara, but it is more difficult than either the Bruang or Role passes. With the exception of these deep glens, with which the mountain sides are every where intersected, there is little to admire in the scenery which this part of the valley of the Setlej displays. Naked and lofty precipices, or bare and broken declivities, present little to attract attention, after the first edge of wonder and fear is worn off; and we had seen so much of this kind in the upper part of Kanáwer, that these features had now lost their power over us. We had, in Macbeth's words, "supped full with horror," and "direness familiar to our thoughts could not now start us."

Thermometer 42°. From Spara Wodar the path gradually ascends for about two miles, when there is a steep descent, chiefly by steps, to the bed of the Babe or Wungar river, a furious and rather large torrent, which is crossed on a sanga of about 40 feet in length, and 26 feet above the stream. This scene is really picturesque and romantic in a high degree. A purgunnah, called the Babe, extends up the bed of the stream; it contains the following villages: Dútarang, Gramang, Yangpa, Krabe and Kampanang. Immediately below the confluence of this river is the jhúla of Wongtú, by which the Setlej is crossed. There had formerly been a bridge here, the remains of which are even yet visible; it was similar to that at Puari which I before compared to that at Wandipur in Butan, and of which a view is given in Turner's Thibet. On each side are fixed several tiers of strong beams inclining upwards, and each tier projecting about five feet beyond the one below it. When the distance between the ends of these beams is reduced to about 40 or 50 feet, a few planks or spars of that length are laid

across, and the bridge thus appears at a distance to consist of three pieces which meet at an angle. The ingress to, and egress from it, is regulated by a guard house or choki on each side, which fills up the whole of the road way; and thus they serve as points of check to an enemy as well as of communication to friends. This bridge had been burned when the Gurkhas attempted to penetrate here, and though we admired the spirit of the act, we could not help regretting the loss of the bridge, forced as we were to cross a rapid and powerful river on a tar or single rope. We arrived at the jhúla at half after nine a. m. and at half after three p. m. when I left it, there still remained several loads on the opposite side. The distance of Nichar where we encamped, from it was four miles and the whole distance was seven and a quarter. Nichar is situated high on the mountain side, and the declivity is much more gradual, so that the ground is open about it and rather level.

From Nichar our next stage was Trade, or Trandeh, to Punda; the path was tolerably good, with partial ascents and descents, leading sometimes through fine forests of deodar. From Punda the path turns up the Saldang glen, remarkable as forming one of the most romantic and beautiful scenes I have noticed. The river is rather a cataract having a great fall and forming a complete bed of foam; the sanga on which we crossed it was twenty feet in length; besides the main there are two smaller branches. The ascent from it is rather steep partly by steps in the rock. The last mile to the village is nearly level, the path good, passing a pretty cascade which falls from the brow of a rock into a basin which it has worn for itself. Trandeh, or Trade, is a neat village and pleasantly situated. Lofty deodars at once shade and adorn it, and the houses are substantial and well built.

Thermometer 36° 5′. Hoar frost on the ground. This was a very severe march to Suran, being sixteen miles and a half, and the road far from good; we did not arrive till after dark. To the Chonda nala is a difficult descent; thence the path is of a mixed kind, occasionally very bad, though with few

ascents or descents of any moment. Half-way the Kandlu nullah is crossed, a picturesque spot where we stopped to breakfast; thence is a steep ascent to Manoutí Danda, a ridge which is reckoned the boundary of Kanáwer; here the aspect of the river valley changes in a remarkable manner. The left bank having scarcely any declivity but spreading out in a nearly level expanse for at least two miles down to the water's edge. The whole of the mountain side is well cultivated and at this time presented the golden picture of a plentiful harvest. The hamlets are numerous too, though small, and the appearance of the country upon the whole is highly pleasing. Seran is the summer residence of the Raja of Bissahir who removes here to avoid the heats of Rampur which is in the bed of the river. It is inhabited chiefly by Banias and people about the Raja's person, and is on the whole rather a neat looking place. The Raja's residence is rather well finished and set off with various gilt ornaments; there is also an old Hindu temple of rather a good style of architecture.

Thermometer 35° 3′. Hoar frost. From Seran we proceeded to Gauri Kot half-way to Rampur, a march of 123 miles; we had made these long marches purposely to arrive in time for the Rampur fair which began this day. The road upon the whole is tolerable and the general appearance of the river valley a good deal as yesterday. We breakfasted at Múzúlia which was half-way, and though we made no delay did not arrive at Gauri Kot till after sunset.

Thermometer 44°. A little distance from Gauri Kot occurs a bad place in the road, which on account of its extreme steepness and the slippery nature of the soil (Mica) is rather dangerous. The path then leads along the mountain face, and afterwards descends to Muteli, a small village situated in a retired glen: a little beyond this occurs a most steep and continued descent of two miles and three quarters, very rugged and very fatiguing. The rest of the path is nearly level, leading along the river bank latterly,

to Rampur, the Raja's residence; the distance was nine miles and a half, and we arrived about twelve o'clock. We found the fair nearly full, though there were still every hour Tartars and Kanáwaris coming in with heavy loads chiefly of the byangi or Tartar wool.

Rampur is situated on a strip of level ground by the river side, and is a small town, consisting like Saran merely of people attached to the Raja's person and a few Banias; above the town is the Raja's house; rather a mean building of naked stone with occasional layers of wood as usual in buildings in the mountains. The roofs are curved something in the manner represented in Chinese pagodas; some pains have been taken to form and preserve the ground in a tolerably level surface; forming a series of platforms and banked up with stone. On each side of the river (on the town side close) rise lofty and rather steep mountains, which seem to be the cause both of a greater degree of cold and heat than would be experienced were the place more open. The sun at this season of the year is not seen till past ten o'clock, so that the mornings feel insupportably cold, while the afternoons, owing to the reflection of the sun's rays from the mass of mountain so near, and partly perhaps from the effect of contrast, appear to be as much too hot; the day we arrived however rain fell which prevented our feeling the heat. The two following days we were much incommoded by it.

The 12° might be called the last day of the fair which had only lasted two days, though three is the term generally allowed. The 13th there were few people and on the 14th they had all disappeared except the fixed residents. The town as I have already remarked is situated along the river bank, on a small level piece, about 400 or 600 yards in length and 100 broad. Here it is the people assemble and range themselves in two rows facing each other, each with his merchandize before him; the wool and salt or Tartar traders, taking one side, and the grain, &c. or lower mountaineers the other. As they do not always understand each other's language, they are sometimes obliged to adjust the barter by presenting a sample of

their own ware and indicating with the hand, how much of their opponents they consider as its price; it is curious enough to see this pantomime. With but little assistance from language, this multitude of people adjust their bargains with wonderful rapidity; the several loads disappear as quick as they arrive, transferred to new hands, so that there is a continued succession of arrivals, and a vivacity and bustle are communicated to the scene that render it highly amusing. The total number of people assembled could have hardly exceeded 3000; of these the Tartars and Kanáweris brought wool and pashm; the latter also woollen fabrics for barter, Sanklath, Pankhís, Dúrís, &c. also raisins and neozas (seed of a pine) and some of them and of the Tartars, Pashmínas from Ladak, a coarse kind of shawl, which costs from eight to forty rupees according to its quality. The lower mountaineers bring grain, iron, spices, cloth, sugar, and other articles; a number of people from Kúllú (a mountain state, separated from Bissahir by the river) also visit this fair. They cross some by the tar or bridge of a single rope (which is here ninety yards in length,) and some on distended skins which would appear to be both a safe and expeditious manner of crossing a river that has not too great a fall.

On the 15th we marched for Nirt; the route lay little above the level of the river and the increasing temperature gave us a sensible proof, how great our descent had been from Seran; the path is generally tolerable and the river appears to flow with a placid current and is little obstructed by rocks. The Naugri river, a considerable stream, joins the Setlej about half-way; it has its source in the falling off of the inner range of the Himalaya which divides the river vallies of the Setlej and Paber. We crossed it on a sanga seventy-two feet long and twenty-two feet above the water, rather narrow and springy: a good deal of flat or table land is seen a little farther on near Dattanger, and a substantial village on the opposite side of the river called Nirmunda. Nirt is a small hamlet situated about a hundred feet above the river bed.

From Nirt to Kotgerh was rather a long march; the distance being about nine miles; we did not arrive till past twelve, and found the ascent from the bed of the river extremely fatiguing, owing to the heat more than the steepness. Our constitutions having been so long accustomed to the bracing air of the Himalaya tract, were little prepared to encounter the heats which even at this season prevail in a river valley, so narrow and so deep as this of the Setlej. The temperature of Kotgerh however which is between 3 and 4000 feet higher, we found agreeable, and a few days after our arrival we had a heavy fall of snow.

From Kotgerh the journey continued along the banks of the river to within a few marches of Belaspur, but as little worthy of description occurred in this part of the route, and as this narrative has already swelled to a size not originally contemplated, I shall conclude my remarks here, referring the reader to the appendix for the few particulars of scientific import collected. In the appendix I have given an idea of the construction of the map and of the methods by which the few points of level fixed were determined. There will be found also two short vocabularies, one of Kanáweri, the other of Tartar words, and some other particulars that were omitted in the narrative. The reader will thus be better able to judge of the value of the few results fixed by this journey, as also what may yet remain desiderata in that interesting quarter of research.

APPENDIX.

THE journey of which I have attempted to give some account in the preceding pages was undertaken as before mentioned, for the purpose of laying down the course and levels of the River Setlej. It will be proper therefore now to give an idea of the manner in which these two objects were accomplished and also to indicate some of the results. This account of the operations has been separated from the Narrative as little likely to afford interest to the general reader. A reference to the accompanying Map will render what follows more intelligible.

1. The particulars on which are founded the positions of the principal points in the mountain survey between the Setlej and Alakananda rivers have been detailed with sufficient minuteness in the preceding volume of the Researches. Of those points however depending on the chain of Triangles, but few offer themselves to the assistance of the Surveyor in his task of laying down the course of this river. A great part of the route described in the preceding pages lies north of the snowy Peaks; and it had not appeared possible at that time to carry any connecting triangles across that range. The points of verification therefore on which the accompanying Map depends, and the elevations indicated in the Section being obtained (with only one exception) by less accurate methods than those on which the southern portion of the Map rests, it is my intention to give a brief but particular account of the data on which they are founded.

2. The first of these (and the most to be depended on I consider) is the latitude of the place. The following Table contains the results of all the observations I made. The instrument was Troughton's Circle, No. 44, mentioned in the former paper. Although it was free as far as I could ever perceive from all collimation, yet, to render the results entirely indepen-

dent of this correction I made it a rule to observe two stars, at least, when practicable. If north and south ; on the same side of Zero : but if both north or both south ; on different sides. This method of observing rendered me also independent of the error in the place of Zero and when the stars were nearly of the same altitude and on different sides of the Zenith ; of any little error, in the adjustment of the glasses, or of the co-efficient of refraction.

OBSERVED LATITUDE OF PLACES.

Place.	*Latitude.*			*Sun or Star.*
Kotgerh Cantonment,	31	18	42	Draconis and Ophiuchi.
Dúdú,	31	11	05	α Aquilæ α Cygni.
Jako,	31	15	45	ditto ditto.
Cave. Head of the Rúpin,	31	19	37	ditto ditto.
Núrú Basa (no village,)	31	21	45	6 Circum. Meridian Alt. of Sun.
Sangla,	31	27	54	Mer. Alt. of Sun.
Púarí,	31	32	57	α Cephei α Aquarii.
Múrang,	31	36	26	ditto ditto.
Camp above Tomba Nadí,	31	41	54	ditto ditto.
Dabling,	31	44	54	ditto ditto.
Namgía,	31	48	30	ditto ditto.
Shipkí,	31	48	33	ditto and Pegasi.
			51	α Aquilæ.
			33	Circum. Meridian Alt. of Sun.
			23	α Cephei and Aquarii.
			42	do. do.
			37	do. do.
			48	C. M. Alt. of α Cephei.
			47	do. do. α Pegasi.
Tashigang,	31	49	59	α Cephei α Aquarii.
Chang,	31	58	36	do. do.
Nake,	31	52	34	do. do.
Lari,	32	04	32	do. do.
Skalkar fort,	31	59	56	C. M. Alt. of Sun.
	32	00	09	do. of a Cephei.
Lío,	31	52	44	α Cephei α Aquarii.
Hang,	31	49	52	ditto ditto.
Sungnam,	31	45	20	C. M. Alt. of Sun.
			44	M. A. of α Cephei.
Turn of river between Jangí and Akba villages,	31	35	17	Sun.
Rarang,	31	35	54	α Cephei.
Pangi,	31	35	04	do. α Aquarii.
Chini,	31	31	36	Sun.
Rogí,	31	30	13	α Cephei α Aquarii.
Chegaon,	31	31	03	Sun.
Spara Wodar (no village),	31	31	51	α Cephei α Aquarii.
Nichar,	31	33	28	α Pegasi α Cassiopeiæ.
Trada,	31	33	13	α Cephei α Aquarii.
Majulia,	31	29	13	Sun.
Goura,	31	28	35	α Cephei α Aquarii.
Rampur,	31	26	35	α Pegasi α Cassiopeiæ.
Nirt,	31	22	03	do. do.
Kotgerh,	31	18	44	42 Obs. Polar Star } Repeating Circle by
			46	100 Sun. } Dollond.
Súni,	31	14	10	α Pegasi α Cassiopeiæ.
Kúmharsen,	31	19	12	2 C. M. Alt. of Sun.

3. The following Table of the local errors on Mean Time of an excellent eight-day Chronometer, by Barraud, is given to shew that no available methods were neglected, but owing to an unexpected irregularity in the rate of the watch, they are not of the value I anticipated. The Immersions or Emersions of Jupiter's Satellites that were observed have been already published, being used to fix the longitude of the FIRST MERIDIAN of the survey. It was considered that the errors of such results as a comparison with the Nautical Almanac could furnish, would be much greater than those even of the imperfect methods finally resorted to.

TABLE OF THE OBSERVED ERRORS (ON M. T.) OF A CHRONOMETER.

Date.		*Place.*	*Slow of M. T.*	*Slow under 1st Mer.*	*No. Days*	*Rate.*
August	10	Kotgerh,	2 11 5			
	14	,,	2 33 3		4	5 45 losing.
	25	,,	3 36 1		11	5 71
	31	,,	4 14 2	4 16 8	6	6 35
September	5	Nagní,	4 40 7	4 48 3	5	6 3
	27	Dúdú,	9 53 7	7 33 1	22	7 95
October	1	Núrú Basa,	11 00 5			
	12	Dabling,	14 11 3			
	15	Shipki,	15 08 1			
	16	,,	15 17 9		1	9 8 } Mean 8 52
	17	,,	15 25 4		1	7 5 }
	19	,,	15 42 2		2	8 4 }
	25	Skalkar,	15 37 2			
	31	Sungnam,	16 29 6			
November	13	Rampur,	13 26 0			
	14	,,	13 32 9		1	6 9
	17	Kotgerh,	13 09 8			
	19	,,	19 4		2	4 8 losing.
	21	,,	27 7		2	4 1
	24	,,	41 1		3	4 5
December	1	,,	14 09 7		7	4 1

4. The four following positions which are to be found amongst those derived from the Triangulation detailed in the preceding volume are used to determine certain stations whence they were visible.

	Lat.			*Long.*			*Elevation.*	
Ralcheng (Snowy Peak)	31°	29′	22″	78°	21′	44″	21	411
Needle (Ditto)	31	19	45	78	18	19	19	044
L. (Ditto)	31	16	04	78	22	25	19	512
Kedar Kanta (Station)	31	01	08	78	09	33	12	689

The stations fixed from these are :

(*a*) Dúdú.
(*b*) Gúnass Pass.
(*c*) Childing Kona Pass.
(*d*) Hangarang Pass.
(*e*) Tashigang.

(*a*) At Dúdú, the Magnetic bearing of Kedar Kanta was observed 150° 00′. The angle of elevation 3° 15′ 45″. The declination 3° easterly. These data with the difference of latitude 597″, 4 give the longitude of Dúdú 78° 3′ 39″; the elevation 8732 feet above the sea,

(*b*) Gúnass Pass. The three snowy peaks Ráldang, the Needle, and L. were observed here. The angle subtended by the first two was 44° 51′ 30″ by the second two 13° 54′ 30″. These data afford excellent means of fixing the Pass by using the elegant formula of Delambre. It would however in this case be necessary to calculate the respective distances of the three peaks, on which account, as well as the favorable situation of all three points, I have chosen a less direct method by using the bearings and assuming a latitude for the pass. The place of Magnetic East and West *on the Limb* was always observed with great care on these occasions, a magnifier being used to observe the coincidences of the Needle (which was frequently made to oscillate) with the line of 90° in the compass box. In every case the slow motion screw was used for making the coincidence perfect ; and as the same precautions were taken in observing the declination of the Needle, it is evident that the Magnetic bearings for near objects were nearly as good as Azimuths. The true bearings then of these three peaks observed as I have described were 53° 53′ 98″; 44 30 and 112 39. The latitude of the pass is assumed to be 31° 21′ 04″. With these data and the position of Ráldang the longitude is found to be 78° 8′ 27″, and with this longitude and the position of the Needle the latitude appears to be 31° 21′ 03″. With the same longitude and the position of L. we shall find the latitude 31° 21′ 05″. The elevations will be found

From Ráldang (L. of E. 3. 48. 53)	15.557 feet.		Mean 15,516
Needle - - -	3. 47. 40	15.492	
L. - - - -	2. 49. 00	15.499	

(*c*) Childing Kona Pass. This station is fixed from the Magnetic bearing of Ráldang combined with the protracted latitude. These are 208° 54′ and 31° 37′ 16.″ The longitude of the Pass is found to be 78° 27′ 27″ and from the observed angle of elevation the height is deduced to be 12,860 feet.

(*d*) Hangarang Pass. Similar Data. The bearing of Ráldang 200° 16′. The protracted latitude 31° 47′ 34.″ The longitude is found to be 78° 30′ 50.″ The elevation from an angle of 3° 04′ 10″ 14.710 feet above the sea.

(*e*) Tashígang. Similar Data. Bearing of Ráldang corrected for declination 215° 51′. Protracted Latitude of place of observation 31° 50′ 05″. Angle of altitude 2° 57′ 50″. Results—Longitude 78° 39′ 12″. Elevation 12,874 feet. The latitude of the place as derived from observation was 31° 49′ 54″ but as it is close under the great Peak Púrkyúl a projection of which has an altitude of 19° or in feet 10,000 nearly, I have allowed myself to increase the latitude 11″, by which means its place is less distorted in the protraction than it otherwise would be. The Peak is to the north of the station and the effect of its attraction must have been a diminution of the latitude.

5. From the five positions of which the above details are given one or two others are obtained in a still less direct manner. At Shipki a small base of 118 feet 6 inches was marked by well defined signals, and the angle which it subtended at a point on the ridge above, was measured by a Theodolite well levelled and found to be 31′ 40″, 30′ 20″, 29′ 30″, mean 30′ 30″. This gives 12,850 feet, as the horizontal distance of the ridge. On this line as a base

the great snowy Peak Púrkyúl was determined. The two observed angles were, on the ridge 61° 27′, at Shipki 95° 1′, concluded angle 23° 32′. From these observations the distance of Púrkyúl appears to be (from Shipki) 28,270 feet which with its bearing 353° 11′ gives a difference of latitude of 4′ 37″ 7 and of longitude 47″. The difference of elevation deduced from the observed angle of altitude (23° 9′ 48′) is 12,036 feet. The latitude of Púrkyúl is then 31° 53′ 17″ 7.

Again from the Hangarang Pass the bearing of this Peak was found to be 62° 48′ correcting for the declination of the needle. The difference of latitude being 343″ 2, the difference of longitude is found to be 13′ 04″, giving the longitude of Púrkyúl 78° 43′ 54″, and that of Shipki 78° 44′ 41″. In the same way the difference of elevation was found from the observed angle of altitude (5° 56′) to be 8021 feet giving for the absolute elevation of this peak above the sea 22,731 feet, and for that of Shipki 10,695 feet.

6. We may now compare the above result of longitude with that given by the Chronometer. The rate from Kotgerh to Dúdú 27 days, is seen to be 7° 24′ losing. At Shipki during four days halt it was 8° 52′; the mean of these is 7° 9′ nearly. Adopting this as the most probable rate from Dúdú to Shipki we have 9′ 55″ 3 as the error on mean time under the 1st Meridian of the Survey (77° 28′ 30″) 15th October. The difference between this result and the actual error at Shipki (15′ 08″ 1) is 5′ 12″, 8=1° 18′ 12″ giving the longitude of Shipki 78° 46′ 42″ or nearly 2′ more than the above; the same calculation applied to the returning observations would give a still more erroneous result 78° 53′ 10″ or 8½′ more than that deduced from Púrkyúl. The change of rate in the watch, which was greater than I had ever known it in the same period, prevents my placing any confidence in either of these results. The detail will have its use if it inspire a cautious dependence on Chronometers, and a salutary suspicion of their results under the most favorable circumstances. No watch that I have

ever seen or read of, had a juster title to confidence than this one; I mean judging from its previous performance.

7. A few particulars more remain to be noted, on Lapcha Pass, the bearing of Púrkyúl Peak was observed 130° 54′ Cor. for declination 133° 49′. The protracted latitude of the Pass (from Skalkar) was 32° 02′ 56″ from these data we obtain the longitude of the Pass 78° 32′ 07″. Some mistake committed in observing or recording the angle of altitude prevents its being used. But from the Snowy Peak Rishi Gangtang (fixed by protraction) and having an elevation of 21,229 feet, as observed from Tashigang, the elevation of this pass would appear to be 13,468 feet. The angle of altitude was 2° 39′ 50″ feet. This result is in some measure confirmed by the angle of altitude of the Pass observed at Skalkar combined with the protracted distance and elevation of that place.

8. In the Survey of the Route an excellent Theodolite was used for the bearings, distant points being freely used as cheeks on the protraction. The distances were determined by Time. Such a method will be thought perhaps loose and inaccurate and so no doubt it is; but when it is borne in mind that such is the rugged nature of these roads that in whatever manner the measure be taken, it will require to be reduced from $\frac{5}{6}$ to $\frac{1}{10}$ before it can be used for protraction, and that this reduction must depend entirely on estimation, there will appear little cause for preferring (except on the score of convenience, any of the three methods which I have been in the habit of employing during my labors in these mountains, viz. Perambulator Measurement, Pacing, or Time. I may also add that I had well exercised myself in the number of paces which may be taken within the minute, on every quality of path, and that this number was always inserted in the field book at the time, as was likewise the reduction of the road line to the straight one for protraction.

9. With regard to the elevations expressed in the SECTION a few of them rest on Trigonometrical measurement as (already detailed), the others are deduced from the following Table of Observations made of the temperature of boiling water. The Thermometer I used was the largest procurable; it had a scale of 40° to an inch. The boiler was a copper vessel about twelve inches in height and two in diameter. It was provided with a false bottom at a height of three inches above the lower one. This was pierced with holes and the water poured in till it reached to about three inches above it. The thermometer was then placed in it so that the bulb was fully covered with water. The reading was made with the assistance of a magnifier of about five or six inches focus which was held quite out of the reach of the steam, the vessel being always open and the steam quite unconfined. I had found that any thing held over the mouth of the boiler even though it did not half close it, had the effect of raising the temperature. But by boiling in the manner I have described I had very consistent results. It will appear perhaps a matter of regret that I had not the THERMOMETRICAL Barometer described by ARCHDEACON WOOLLASTON. This Instrument however is not made of sufficient extent as yet to comprehend within its range the boiling points given in the following Table. I mean without using the method of boiling and tapping as described by the inventor. This method would have been of less easy application in a journey hurried as this necessarily was from want of supplies, than in the easier journies through civilized Europe. I can think of nothing which the common Thermometer wants to render it perfectly adequate to these measurements, beyond some enlargement of its scale, and a division into inches and decimals by a vernier. One-fourth or even one-fifth of an inch to each degree would be amply sufficient.

10. In the following Table I have added a column shewing the corrected result; the manner of obtaining it will be explained a little farther on.

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nit of Deodar
Upper Limit o
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SECTION of the **ROUTE** *from* Lárí *in* **LADAK** *to* Súní *on the* **SETLEJ.**

Limit
Lower
Limit
Upper
Upper
Upper
Lower
Lower
Harang Pass Snow within a few hundred feet
Birch
Deodar Pine
Neoza Pine
Mebar
Baring
The grape back ward
Bed of Setlej River
15000
14
13
12
11
10000
9
8
7
6
5000
4
3
2
1
N 37° W.
N 57° E.
N 64° E.
N 20° E.

Clay Slate
Tomba Wodar
Hopcho Wodar
Clay Slate
Dabling
Greejs
Kap
Grape scarcely ripens
15000
14
13
12
11
10000
9
8
7
6
5000
4
3
2
1

SECTION of the **ROUTE** *from* Dúdú *on the* Rúpin *to* Lárí *in* **LADAK.**

TABLE OF BOILING POINTS.

Date.		Place.	Bg. Pt.	Temp. of Air.	Corrected Elev. above Sea.	Remarks.
					Feet.	
Sept.	27	Dúdú,	199,00	57,0	8790	
	28	Jako,	198,10	46,0	9188	
	29	Cave. Head of Rupin,	193,70	38,0	11,826	
	30	Snowy Pass. (Gunass,)	187,30	36,0	16,067	
Oct.	1	Núrú Basa, (no village,)	191,10	48,2	13,755	Mean of both Observations.
	2	Snowy Pass,	187,00	36,6		
	3	Sangla,	198,20	49,3	9178	
	4	Mebar,	197,30	46,5	9698	
	5	Puari,	201,90	61,3	7033	
	6	Púrbúnní,	199,80	59,0	8324	
	7	Riba,	199,70	55,0	8331	
	8	Múrang,	198,90	51,3	8767	
	12	Dabling,	196,95	50,7	9987	
	13	Namja,	197,25	49,0	9150	
	15	Shipki,	195,30	58,7	11,192	
	17	Bed of Setlej,	197,20	61,3	10,005	
	18	Ridge above Shipki,	186,30	38,0	16,584	
	19	Shipki,	195,40	61	11,192	Mean of the two 11,180.
	22	Namja Jhúla,	198,80	53,0	8854	
	,,	Tashigang,	193,00	46,5	12,459	
	23	Road to Nako,	191,20	50,2	13,735	
	,,	Nako,	192,90	42,5	12,438	Barley grows at some height [above this.
	24	Chang,	196,00	44,0	10,479	
	25	Skalkar,	195,50	55,0	10,998	
	26	Lari,	194,25	39,8	11,515	450 feet above the river bed.
	28	Lio,	197,60	44,0	9471	
	29	Hang,	193,65	35,5	11,812	
	30	Súngnam,	197,40	50,0	9691	
Nov.	1	Kanam,	198,20	42,0	9060	Excellent Apples grow here.
	2	Jangi,	198,85	38,5	8627	
	3	Rareng,	198,20	45,5	9117	
	5	Rogi,	198,05	46,3	9226	
	6	Merú,	198,80	42,0	8687	
	7	Spara Wodar,	204,50	48,0	5336	Bed of River.
	8	Wongtu Jhúla,	204,80	62,3	5289	
	,,	Nichar,	202,05	47,0	6774	
	9	Trada,	201,35	47,3	7200	
	10	Suran,	201,10	43,7	7246	
	11	Gowra	203,30	48,0	6042	
	12	Rampur,	208,05	59,5	3375	
	14	Nirt,	208,80	64,0	2970	
	15	Bed of Setlej,	209,40	45,0	2552	
	,,	Kotgerh,	202,38	50,0	6603	Mean of the Observations.
	,,	Kúmharsen,	204,60	48,0	5279	
	,,	Kangal,	203,90	52,3	6311	
	,,	Batora,	210,0	60	2281	About 100 feet above the Ri- [ver.
	,,	Khyra,	209,40	60,7	2613	
	,,	Súní,	210,00	61	2283	

11. In deducing the Elevations given in this Table I have used the following comparisons made with the same Thermometer and an excellent

Barometer filled with Mercury revived from Cinnabar and well purged of air. These correspondences being compared with Dalton's Table of the force of steam (Thomson's Chemistry, vol. i.) give the errors of the Thermometric scale, and from them the subjoined little Table is calculated by interpolating the intermediate numbers. Using this Table to correct the indications of the Thermometer, the corresponding Barometer is taken from Dalton's Table, and the height deduced therefrom in the usual manner, correcting for the temperature of the air as directed by M. Ramond in calculating single observations of the Barometer. It is known that without corresponding observations, the results of Barometrical measurement are likely to be erroneous. To this error the method by boiling is also subject. But in these climates, where the Barometer is so much more regular in its indications than in Europe, this error lies within a less compass. I find from a register kept very carefully at Saharanpur that the Maximum annual range is only 6 inches and in any one month not more than 4 inches. This error cannot then affect the boilings by more than 300 feet in the extreme case, and generally much less. But they are subject also to their own error, arising as well from the smallness of the scale as defect of observation. Every precaution was taken to reduce this last within as narrow limits as possible. Still I am afraid the error may have amounted in some cases to half a degree. It is hardly credible that both these errors should lie the same way; and yet we see that in the Elevation of the Pass something of this kind must have occurred, for the result by boiling exceeds that of Trigonometrical measurement 551 feet. I need scarcely say that with regard to the purity of the water used I was most scrupulous; I find it difficult therefore to understand the above anomaly, unless it be referable to the uncertainty of the correction for the temperature of the air.

Table of the Observed Correspondences of the Temperature of Boiling Water with the Indications of the Barometer.

Observed Bg. Pt.	Observed Barometer	Temp. of Barom.	Bar. reduced to 54°	Bar. Cor. for Diam. Tube	Dalton's Tem. of Steam.	Error of Scale.	Obsd. Bg. Pt. Cor. for error of Scale.
210,00	27,85	85	27,76	27,71	207,95	2,05	207,86
207,38	26,41	82	26,33	26,28	205,28	2,10	205,16
207,25	26,33	71	26,28	26,23	205,19	2,06	205,03
206,50	25,87	79 5	25,80	25,75	204,27	2,23	204,26
205,90	25,60	83	25,52	25,47	203,73	2,17	203,64
205,40	25,25	74	25,20	25,15	203,10	2,30	203,13
204,85	24,86	62 5	24,84	24,79	202,36	2,49	202,56
204,25	24,69	65	24,66	24,61	202,00	2,25	201,94
204,00	24,60	89	24,51	24,46	201,69	2,31	201,69
198,15	21,71	69	21,68	21,63	195,89	2,26	195,72
188,50	17,39	42	17,41	17,36	185,90	2,60	185,95

Table of the Error of the Thermometric Scale.

Obsd. B. P.	Error.	Obsd. B. P.	Error.	Obsd. B. P.	Error.
188	2 55	197	2 44	206	2 26
189	2 54	198	2 43	207	2 23
190	2 53	199	2 41	208	2 20
191	2 52	200	2 39	209	2 17
192	2 51	201	2 37	210	2 14
193	2 50	202	2 35	211	2 10
194	2 49	203	2 33	212	2 06
195	2 47	204	2 31	213	2 02
196	2 46	205	2 29	214	1 98

The full amount of the correction due to the temperature of the air has been applied. To obtain the mean temperature of the column, I have calculated that, at the level of the sea, from the observed temperature and the approximate height, allowing a change of 1° for every 300 feet of Elevation. The correction is obtained by the formula $\frac{T-32^{\circ}}{448+T.}$ H. in which T. is the mean temperature and H. the approximate elevation.

12. In forming the section, I have been doubtful as to the method I ought to follow, whether to give an orthographic projection of the several points supposed to throw off perpendiculars on a plane assumed in position, or to constitute the several lines of route the intersections of the planes of projection with the surface. Though preferring the former for some reasons needless to mention, I have chosen to adopt the latter as most conformable to the examples hitherto given of sections. My lines

of route are however very short and very variable in direction, a defect of this method as applied in this particular instance. In order however to represent the fall of the river I have supposed it to form an orthographic projection on the plain of section and as this latter is in most cases parallel to the river's course, it will not occasion any considerable distortion. Where however such does occur it is noted in the section.

13. It now only remains that I should notice briefly the principal results. At Shipki the river bed is elevated 10,005 feet; at Namja Jhúla 8854. The mean is 9430 which may be considered the elevation of the intermediate point. At Spara Wodar again the elevation is 5336 feet; and at Wongtú Jhúla 5289. The mean of these, 5313 is taken as the elevation also of the intermediate point. Now the distance by the Map is 60 miles or allowing $\frac{1}{6}$ for the devious windings of a mountain river 70; the fall is 4119 feet, or 59 feet, nearly, per mile. Again, at Batorah the level is 2181 feet, and at Súní 2083 feet; mean 2132, or below Wongtú 3181 feet. The distance being 53 (or corrected 62) gives a fall of 51 feet nearly. The present survey of the river terminated at Súní but judging from the analogy of other rivers, I infer that it has a further fall of 1000 feet to 1200, before it reaches the plains, in a course of about 56 miles. The total fall from Shipki would then be about 8400 feet. Captain Webb in his visit to the Nítí Pass informs us (Journal of Science, vol. ix.) that the bed of the Setlej has there an elevation of 14,924 feet. This is 5494 feet higher than the level near Shipki. The course of the river would appear to be about 110 miles, so that here also the fall is between 50 and 60 feet per mile. At Shipki the river has a mean width of about 100 feet; the depth I did not measure, but I should suppose it to be about 6 feet. These data, with the above fall, using the Chevalier De Buat's formula would indicate a velocity of about 200 feet in the second, or nearly 12 miles an hour; a result certainly too high. From Larí to the confluence, the fall of the right branch or Spiti River is 2341 feet; the distance being 33 miles or corrected as before 38. Here therefore the fall is 82 feet 5 inches per mile. A course of 50 or 60,

miles above this point reckoning it to have the same declivity, would bring its waters under the influence of perpetual frost.

14. Some differences will be observed between the results given in this paper and those contained in the former. They are generally in the elevations and have been occasioned by the use of Dalton's Table which had not been seen when that was published; one or two have originated in revision. The Gúnas Pass is one of these.

A Vocabulary of Kanáweri and Tartar (Bhotia) Words.

English.	*Kanáweri.*	*Tartar.*
Man,	Mí,	Mí.
Male,	Changmí.	——
Female,	Chasmí,	Múní.
Father,	Apa,	Owgú.
Mother,	Amma,	Amma.
Son,	Chang, Dekhraj,	Túbú.
Daughter,	Chime, Chiming,	Pomo.
House,	Kim,	Kangba.
Village,	Deshang,	Hyúl.
Fire,	Meh,	Meh.
Bread,	Rot, Lotri,	Dik.
Milk,	Kherang.	——
Butter,	Mar,	Mar.
Salt,	Tsa.	——
Honey,	Was.	——
Tea,	Chá,	Chía.
Dried Grapes,	Dákhang,	Gúndúm.
Wheat,	Jad,	Pakbe.
Barley,	Chak,	Soa.

English.	*Kanáweri.*	*Tartar.*
Meal,	Kankang.	——
Cow,	Sang,	Balemg.
Bull,	Damas,	Sangú.
Ewe,	Khas,	Mamori.
Ram,	Húlas,	Ro,ú.
Weather,	Khár,	Khalba.
He goat,	Aích,	Rabo, } This is the Shawl goat.
She goat,	Bakhar,	Rama, } This is the Shawl goat.
Dog,	Kío,	Kí.
Cat,	Púshí,	Píshí.
Book,	Pothí,	Potí.
Paper,	Kaglí,	Shúgú.
Ink,	Seahí,	Naksa.
Pen,	Kalam,	Dingkyo.
Pipe,	Gangsa,	Gangsa.
Flageolet,	Bashang,	Lingú.

These two instruments with the steel curiously ornamented and some keys of a singular fashion, form the personal equipment of a Bhotia. The flageolet is double, but the notes are unisons. The scale seems irregular and uncertain.

English.	*Kanáweri.*	*Tartar.*
Sword,	Terwal,	Chipsa.
Cloth, (Calico,)	Kapra,	Ra.
Broad Cloth,	Porin,	Nambú.
Wool (Sheep's,)	Shingcham,	Shing.
Ditto (Shawl,)	Pashm,	Lena.
Tent,	Tamboa,	Gúr,
Water,	Tí, Thí,	Chú.
Snow,	Pom, Kherang,	Kha, Oman.

English.	*Kanáweri.*	*Tartar.*
Ice,	Sahang,	Chagrúm, Kyakba.
Hoarfrost,	Págallang.	——
Stone,	Rak,	Deh.
Mountain,	Rang,	La.
Hill,	Daní.	——
Ascent,	Tang,	Kyen.
Descent,	Chor,	Thúr.
East,	——	Sher.
West,	——	Húp.
North,	——	Chang.
South,	——	Lo.
Wind,	Lahn,	Laúta.
Cold,	Liskdú.	——
Heat,	Jángdú.	——
Day,	Laé, Lya,	Ninon.
Night,	Rating,	Sanmori.
Year,	Barsang.	——
Month,	Gol.	——
Road,	Bátang.	——
Bridge of Wood,	Cham.	——
Bridge of Ropes,	Tarang.	Cháyam, Sálam.
Musket,	Túbak.	Túba.
Knife,	Khúr.	Tí.
Gun Powder,	Darú.	——
Eye,	Míkh.	——
Nose,	Stakúsh.	——
Tree,	Botang.	——
Field,	Rim.	——
I,	Geh.	——
You,	Kih.	——
He,	Núh.	——

The names of the Week in Kanáweri are Hindí with the termination *ang* affixed. The Months seem to be similarly formed thus :—

Hindí.	*Kanáweri.*
Chyt,	Chetrang.
Bysakh,	Besakhang.
Jyeth,	Jestang.
Ásárh,	Ang.
Sáwan,	Sonang.
Bhádon,	Badrang.
Asin,	Indramang.
Kartik,	Kartang.
Mirgsir,	Mukhserang.
Pús,	Ang.
Magh,	Mang.
Phagún,	Phagoonang.

It is remarkable in the above that the two months in which the Solstices occur have the same name, *Ang*.

The Numerals in Kanáweri and Bhotia are as follows :—

English.	*Kanáweri.*	*Bhotia.*
One,	Íd,	Che.
Two,	Nísh,	Ní.
Three,	Súm,	Som.
Four	Jin,	Jí.
Five,	Gna,	Gna.
Six,	Túk,	To.
Seven,	Stísh,	Dún.
Eight,	Ru,	Gye.
Nine,	Sguï,	Zú.

English.	*Kanáweri.*	*Bhotia.*
Ten,	Saí,	Chú.
Eleven,	Sehíd,	Chokshí.
Twelve,	Sanísh,	Chooní.
Thirteen,	Sohrúm,	Choksún.
Fourteen,	Sapú,	Chúbjí.
Fifteen,	Sanga,	Changna.
Sixteen,	Sorúk,	Chero.
Seventeen,	Sastísh,	Chobdam.
Eighteen,	Sara,	Chobgye.
Nineteen,	Saguï,	Chúrgú.
Twenty,	Níja,	Níshú.
Twenty-one,	Níjaíd.	——
Thirty,	Níja Saí.	——
Thirty-one,	Níja Sahíd.	——
Forty,	Nísh Níja.	——
Fifty,	Dhaí Níja.	——
Sixty,	Súm Níja.	——
Seventy,	Súm Níja Saí.	——
Eighty,	Pa Níja.	——
Ninety,	Pan Níja Saí.	——
One Hundred,	Ra.	——
One Thousand,	Hazar.	——

The following sentences will exhibit in a clearer view the total dissimilarity to Hindí of either dialect as well as to each other.

English.	*Kanáweri.*	*Bhotia.*
How far is that village?	Núdeshung tetra warak dú?	
What is the price of this?	Zú múllangte?	
Is it cheap or dear?	Yú múllang cheradúa teang dúi?	
Give him a rupee.	Júpang ea rúpí raníng.	

English.	*Kanáweri.*	*Bhotia.*
When will you go to Kamrú ?	Mohne terang bite ?	
What is this ?	King cha namangto ?	[ing ot
How far is Gárú ?	Gárú tetra warak dú ?	Gárú cham tagar-
Is the road good ?	Om dam dú ?	Sam púchang ot ?
When shall I arrive ?	Tetrang Púgta ?	Cham la tel ?
How far shall I find water ?	Te warak ti pariato?	Cham le chú tok ?
Is there much ascent ?	Tang choras ?	Kea mongbo ?
When will you go to Leh ?	Lio terang biti ?	Liro nam dogan ?
What merchandise have you ?	Kinondo teta Sowdato ?	Kyole chang chi chi [hoé ?
Will you sell it ?	Re te yenú ?	Te chúngane ?
Come here.	Júa je.	Dira shoh.
Go there.	Napa bye.	Phala song.
What is your name ?	Kin hamang tedúing ?	Ke min chi ?
Where do you come from ?	Kinna ham chúe ?	Ke kang naúng ?
How many houses are there in this village ?	Jú Deshang teih kin to ?	Dih yúlna kangba [cham hoé ?

These specimens, scanty and imperfect as they are, will tend to give some idea of the nature of the dialects. With respect to the written character in Kanáwer I cannot speak with certainty, but in the Bhotia or Tartar villages they have the Úmma and Sirma characters (or printed and written) of Thibet. The general resemblance of the former both in their forms and names to the Sanskrit has been noticed. I have now before me an alphabet (or ka, kha, as he called it) written by the Lama Ring Jing of Dabling, and comparing it with that given in Yates's Sanskrit grammar the resemblance is very striking. There are however differences, chiefly unimportant ones in the manner of forming the characters. This Lama had a book printed in this character, the letters yellow, on a deep blue ground; it was ornamented also with pictures of their gods or heroes, painted with very bright and vivid colors but without any idea of keeping or perspective.

Information was always sought for (when the time allowed it) as to the distances and nature of the road between the different places of note beyond the frontier. The following contain some of the principal particulars collected.

1. Púrbúnní on the Setlej to Gárú (Gertop.)—The particulars given by Kissam Das Seyana.

Púrbúnní to Richba.
Richba to Nissang.
Nissang to Tomba, (no village, fire-wood and shelter.)
Tomba to Dabling.
Dabling to Namgía.
Namgía to Shipki.
Shipki to Stia.
Stia to Sherangla, (shelter and plenty of fire-wood.)
Sherangla to Núgú.
Núgú to Loxo or Núxo.
Loxo to Baú Kúmon.
Baú Kúmon to Rabgealing.
Rabgealing to Choxe Chúrkang.
Choxe Chúrkang to Laling.

From Laling, Gárú is three day's journey. A high range called Dangbo is crossed; some snow on it; fire-wood scanty. The people beyond Shipki are called Jar or Zar and belong to Wassang or Uchang as it is sometimes called. Beyond Shipki the road is practicable for horses. Rebgealing and Laling are both on the Setlej; Cháprang is opposite the former; Mánsarower is seven days from Cháprang; Tokbo is the name of the Gárú Pergennah. Sagtad, Bamtad, Majan, Lúdúr, Changtaling, and Mápang, are the districts in which shawl wool is chiefly produced. From Cháprang to Chúngsa (Nílang on the Jahnavi) six days. A road to Chúngsa also from Sangla on the Baspa.

2. The Lake Mánsarower.—Particulars furnished by the Lama Ring Jing of Dabling.

It is from four to seven day's journey in circumference, according to the season, and is called by the Bhotias Mápang. There is a smaller lake near it called Lankachu; in the rains they communicate. Out of Mápang proceed four rivers towards the four opposite points, 1. Tamja Kampa flows towards Ussang. 2. Mamjo Kampa towards Púrang. 3. Lang Jing Kampa (the Setlej.) 4. Ling Jing Kampa towards Ladak. He has seen, he says, each of these four rivers, and asserts that each flows from the Lake Mápang. The Setlej flows through the smaller lake Lankachu. Gangri is a Snowy Peak near the lake much venerated by Hindus. Júng is the name of China.

3. Shipki to Gárú or Gertop.—Particulars by Bali Ram Seyana, of Namja.

1. Shipki to Stia.
2. Stia to Meyang.
3. Meyang to Nú.
4. Nú to Klokh.
5. Klokh to Kinípú.
6. Kinípú to Rúkúm.
7. Rúkúm to Shangsi.
8. Shangsi to Shyang.

Shyang to Gárú three and a half stages—no villages; high ground traversed with much snow. Cháprang is six day's journey from Gárú. Peldong and Ling are two villages on the road.

4. Mánsarower and Man Tulai.—Chang Ring Jing, a Beopari of Maryúm, a village one day's journey from the lake gives the following particulars.

Mánsarower is in his opinion a mountain; Mantalai a lake; from the latter no river has its exit but from the former four rivers spring, as follows:—

1. Lang Jing (Setlej) to the West and South.
2. Tamjok, to the East and North.
3. Sing Jing between the preceding and flows to Ladak.
4. Mamjo or Mabjok opposite the preceding towards Gerhwal. Tangshúng, Mehshúng, Lodok, Mahjun, Changtaling are the chief districts for the Shawl Wool. A Zúmpúng or Killedar of Maha Chín (China ?) resides at Cháprang. He is of a fair complexion.

5. Gárú to Leh (capital of Ladak.)—Particulars by the above.

No. of days.	
1	1. Eígong, a village of forty houses, level road and passable for horsemen.
4	2. Teshígang, a village of a hundred houses, Gelums or Monks.
2	3. Dumjok, twenty houses, a stream which falls into Sing Jing at Leh.
2	4. Kolok, a village of eight or nine houses.
3	5. Koígúl, fifteen or sixteen houses.
5	6. Múrt, thirty houses.
4	7. Rúpsho, twenty houses.
3	8. Gya, sixteen houses.
2	9. Mírú, eight houses.
2	10. Himmí, a hundred Lamas and Gelums reside here. No farmers.
2	11. Leh, two hundred and fifty to three hundred houses. The Raja of Ladak resides here.
32	

6. Shipki to Cháprang.—Particulars by Chang Ring Jing.

1. Lopchak, Bank of Setlej, three houses.
2. Tía, ditto, cross on boarded Sanga, eight houses.
3. Myang, opposite (i. e. to Shipki) side of Setlej, twenty houses.

4. Nú; Setlej, half a day's journey to right, eight houses.
5. Lúk; Setlej, still farther, four or five houses.
6. Lakba; Setlej, not a day's journey, four or five houses.
7. Shangze; Setlej, about two miles, nine or ten houses.
8. Cháprang, this side Setlej—ford, twenty houses.

A fort above the town or village. It is built of stone and will contain from 1500 to 2000 men. The road is practicable for horses. A horseman can go in three days; a loaded sheep in five. Ling is two hour's journey beyond Cháprang.

7. Gárú (Gertop) to Mánsarower.

1. Túkyú, eight houses.
2. Mensar, twelve houses, inhabited by Lamas, } These are two very long stages.
3. Chúpta, four houses. }
4. Chekúng, two houses.
5. Karlep, six houses.
6. Turjan, twelve houses, inhabited by Lamas.
7. Mánsarower, sixty-four houses, Lamas.

8. Bekar to Shangze.

1. Ríoh, left bank of Setlej.
2. Foshang, ditto.
3. Cháprang, ditto.
4. Rúkúm, right bank.
5. Shangze, ditto.

Bekar is two or three day's journey from Nissang; the road crossing a very high ridge.

9. Lari to Kúngri.—Balí Ram Seyana of Namja.

1. Tabo, a few miles.
2. Pokso.
3. Dankar, a fort. Muní, a large village opposite.
4. Tangtí Konj.
5. Kúngrí.

Under Dankar two branches of the river unite the Spino and the Lidang so called from the Pergunnahs they flow through. Beyond Kúngri are Kúlling, Talling, and Baro, on the banks of the Spino which is the right branch. On the Lidang are Laru, Paling and Rangreh. The Lidang has its source in the high range Kúngúm La; five day's journey from Dankar. Does not know where the Spino springs from.

10. Gárú to Cháprang.—Same informant.

1. Shing Lapcha.
2. Túktag.
3. Largú.
4. Peldong.
5. Ling. A bridge over the Setlej formed of iron chains.
6. Cháprang.

11. Particulars furnished by a Kanáweri Beopari from Leh.

Chang to Rúpsho five day's journey.
Rúpsho to Rútoh, twenty day's journey.
Rúpsho to Leh, ten day's journey.
Lári to Leh, fifteen day's journey.

12. Skálkar to Gárú.—By a man of Skálkar.

1. Changar, (no village,) wood and water; a cave.

2. Sagtad, a village of three houses.
3. Champa, village of three houses.
4. Súnegyúl, twelve houses.
5. Súm Lakhar, (no village,) wood and water.
6. Bhutpú Ghatí, source of Yung Chum which joins the Spiti just above Skalkar.
7. Chákara Chang, no village, encampment, tents black, formed of the hair of the yak.
8. Khaurkhíl, no village, water.
9. Kharkhúm Chang, encampment, no cultivation.
10. Dúkbo; one tent, no wood.
11. Shang; encampment, twelve or thirteen tents.
12. Laoche; no village or encampment.
13. Zúnjúng, two tents.
14. Kungya; no village or encampment.
15. Gárú.

At most of these stages wood is not procurable, the only fuel is the dung of the yak. Ranglo is twelve day's journey from Larí. Tangdí, two from Ranglo.

13. From Súngnam in Kanáwer there is a route to Munes in Ladak. Damakshú is the name of the high ridge crossed. It is said to be covered with snow. Munes is three day's journey from the crest and one day farther is Dankar.

14. From Nissang also there is a road to Stang and Bekar, two villages on the Setlej, between Shipki and Cháprang. This route crosses a very high ridge covered, I believe with snow. It leads up the bed of the stream which flows under Nissang.

15. There is a direct route also from Shipki to Skalkar crossing the lower part of the Púrkyúl ridge; it is represented as both difficult and dangerous.

VII.

On the Building Stones and Mosaic of Akberabad or Agra.

By (the late) H. VOYSEY, Esq.

To the Secretary of the Asiatic Society.

Sir,

WE have all heard of the magnificence of the Tajmahal and of the precious stones used in its Mosaic; of the robberies committed by the Jhats; and of the substitution of others of inferior value.

Perhaps an enumeration of the stones used in the structure of this beautiful Mausoleum, as well as of other buildings in Agra, for the purposes of truth and of fixing the proper bounds to our admiration, may not be foreign to the scope of the Asiatic Researches, particularly as some of them are objects of geological interest.

The stones composing the main structure of all the public buildings at Agra or in its vicinity are of two kinds, sandstone and crystallized lime stone or marble.

The Fort; the greater part of the Mausoleum of Akber at Secandra; the Jamâ Mesjid; the gateway, wall, casement and Mesjids of the Táj; are built of the sandstone. The Tájmahal or tomb of the favorite wife of Shah Jehan; the Motí Mesjid and some buildings in the interior of the fort are built of marble.

The sandstone is of a disagreeable colour, and from its strong resemblance at a distance to brick, forms a mean and ugly contrast to the brilliancy of the polished marble structures, which are reared on it. It is not a good building stone, decomposing very readily, particularly the slaty kind, which contains a considerable quantity of mica and iron. It is remarkable for its veiney appearance and for the grey circular spots, of various size diffused over its surface. Some of them exhibit the singular appearance of a small protuberance or tail like that left on a bullet, when cast in a mould. A horizontal and vertical section of one of them, shew that they are spherical.

This stone is quarried about twenty-two miles west of Agra; at Fattehpur Sikri, in the hill, on which the Mausoleum of the famous Selimshah Chistí is built. This low range runs in a nearly N. E and S. W. direction and the dip of the strata which are very distinct varies from an angle of 25° to 50°: nearly at right angles to the direction of the hill, in a S. S. Westerly direction. It is remarkable that a range of hills South of Fattehpur, of the same rock, dips in a contrary direction; the precipitous face being to the Southward and the dip to the Northward.

It belongs to the old red sandstone formation of Werner, and is the first of his floetz rocks. Mc'Culloch and Jameson, however although not agreeing in the mode or relative period of its formation have placed it among the primary rocks. I have little doubt that this rock will be found incumbent on granite, as I have invariably found it in the peninsula of India and in other parts of Hindoosthan. At a place lying between Wárangal, the ancient capital of Telingana and the Godaveri, I have seen a rock

with exactly similar characters, even containing the grey spherical spots, but of rather larger dimensions. The grey sandstone which is also found in the buildings of Agra, differs in no respect but colour, from the red, the passage taking place very frequently both in a gradual and in a sudden manner from red to grey, in the same block. I think it probable that this range of sandstone forms part of the great sandstone formation of India; on the N. E. boundary of which, are found Fattehpur Sikri, Machkund, Dholpur, Gualior, Kallinjer, Chunar and Rotasgher; and that it is connected to the S. W. with that of Gondwana.

The crystallized limestone is said to come from Jaypur, but I have not been able to obtain any precise information on this point. The specimens which I have examined, appear to be pure carbonate of lime, of a large rhomboidal grain, effervescing very briskly in acids. I have seen no specimens, which contain carbonate of magnesia, although the Hindu images formed of dolomite or magnesian limestone, which are commonly sold in Calcutta, are said to come from Jaypur. The Garrah Mandela limestone is a dolomite of a small grain and more nearly resembles that of the above-mentioned images. The marble of Agra resembles the Carrara marble of Italy in the purity of its white, and in its containing grey streaks.

The stones used in the mosaic of the Táj, and of the other buildings, are of twelve kinds, including the different species of Calcedony; they are,

1. The Lapis Lazuli—Lajaverd.
2. The Jasper—Támrasang.
3. Heliotrope.
4. Calcedonic Agate. } Akít.
5. Calcedony. }
6. Carnelian.
7. Sardé.
8. Plasma or Quartz and Chlorite.

9. Yellow and striped marble.

10. Clay slate.

11. Nephrite or Jade.

12. Shelly limestones, yellow and variegated—Sengmiriam: and lastly a yellow stone called "Seng tilaí" it is of a golden colour, but I had no opportunity of ascertaining, if it really be a stone.* The whole of these with the exception of the shelly limestones, are used in the Mosaic of the Taj.

1st. The Lapis Lazuli I am inclined to think is a foreign stone. I have not hitherto found it in India. It is said to come from Ceylon and from Thibet. Some pieces which form the upper border of the tomb of Momtáza Begam are of a beautiful deep blue colour, containing interspersed crystals of Iron Pyrites, which the ancients imagined to be gold. This stone is the most rarely used in the Mosaic of the Taj.

2. The Jasper is blood-red, and of the kind found in the basaltic trap and wacken rocks of Hindusthan and in the beds of rivers issuing from them.

3. Some of the specimens of Heliotrope or Bloodstone are large and beautiful, and it is used in great profusion in the Mosaic. This stone is also found in great abundance in the same locality as the Jasper.

4, 5, 6, and 7, are generally very beautiful, and are translucent, verging on transparent. They are of various shades of red, white and yellow. Among the Agates are the ribbon agate, the fortification agate, the tubular agate, moss agate or mocha stone and the star agate. The Carnelians and Sardés are remarkably fine. These stones are all found in the same localities, as the last. The Sone, the Nerbaddah and Godaveri rivers are said to produce them in abundance. The great manufacture is at Cambay. I once saw a lingam of agate which had been found in the Godaveri. Its weight was probably from six to seven pounds, and it was finely zoned.

* It is said to come from Kemaun.

8. The Plasma, which appears to me to be a mixture more or less intimate of Quartz and Chlorite, is frequently found in the basalt and amygdaloid rocks of the Dekhin: its principal use in the Mosaic is to vary the shades of the leaves of the flowers.

9. The yellow marble is seen principally in the tombs of Etimad ad Daulah, the Vizir of Jehangir. His sarcophagus and that of his wife are formed of solid blocks of it. It is said to come from Guzerat. Not being able to procure bits of this or of the striped marble, I was not able to ascertain their nature.

10. The Clay slate appears to resemble that which I have seen from Monghir and from the ruins of Gour. It is used in the borders of the Mosaic as a contrast to the white marble, but takes a very inferior polish and is much subject to decomposition. The large takht of Shahjehan near the private hall of audience in the fort, is composed of an entire slate of this stone.

11. The Nephrite or Jade, I have only seen in the Zenana of Jehangir. It is of the same kind as that sold in Calcutta in the shape of dagger's handles, spoons, cups, &c. Some rough specimens of it, which I procured from the bazar contained a considerable quantity of talc intermixed, which is not an uncommon occurrence in this stone.

12. The yellow shelly limestone is remarkable for the different species of the genus Cardium, which it contains, the ribs and transverse striæ of that genus of shell being very distinct. The matrix is composed of clay, silex and oxide of iron; it is softer than the crystalline yellow limestone which fills up the outline of the shells, and consequently takes an inferior polish: where it has been exposed to the tread of the naked feet of pilgrims, this difference is particularly obvious, the shells being left in relief by the

wearing down of this softer matrix, presenting a curious and pretty appearance. An easy mode of dissecting this limestone is afforded by placing a piece of it in diluted muriatic acid, which dissolves the pure carbonate of lime of the shells with great rapidity, leaving the spaces empty in which they were previously enclosed. The shells are much broken, and I found it difficult to determine whether there are any of the genera Solen or Mya amongst them.*

The shells of the variegated limestone are less distinct, the stone itself being more compact and containing enclosed pieces of clay slate: they may however be sometimes satisfactorily ascertained to be of the same genus, Cardium; it contains a smaller quantity of carbonate of lime: but the same peculiarities from wearing down exist, and it may be dissected with equal ease by the aid of the acid.

I have been informed that these marbles come from Guzerat but whether that is their habitat I cannot tell. From the looseness of their component parts, and want of compactness, I think they are tertiary limestones, possibly of modern origin, like those in the vicinity of Pondicherry.

The whole of these stones and marbles are said to have been the produce of commuted tribute, or to have been received as gifts from tributary powers; but the labour bestowed on polishing and giving the exact shape to such hard materials, must have been immense, and forms the distinguishing feature of this magnificent work.

A single flower in the screen around the tombs, or sarcophagi, contains a hundred stones, each cut to the exact shape necessary, and highly polished; and in the interior alone of the building there are several hundred flowers, each containing a like number of stones.

* I do not think these limestones are at present imported into Agra; they are procured, for the purposes of the artist from the numerous ruined tombs and mesjids with which this district is covered.

When therefore the magnificence and beauty of the materials, the size of the building and the immense pains and labour bestowed upon the whole are taken into consideration; it may be safely averred that it has not its equal in the world.

I am, &c.

H. H. VOYSEY.

VIII.

Sanscrit Inscriptions.

By (the late) Captain E. FELL.

With Observations by H. H. WILSON, Esq. Sec. As. S.

THE Society having been some time in possession of various translated Inscriptions by the late distinguished scholar Capt. E. Fell, think it due to his memory, as well as to the value of the documents, to offer them to the public.

The first of these was found at Garha Mandela; in what situation, is not upon record. Capt. Fell's intention to furnish the necessary illustrations both of this, and of the Inscription at Hansi, having been delayed till the papers should be revised for publication, and having been finally disappointed by his premature death. The Hansi inscription was copied from a stone in the fort.

The Garha Mandela inscription is remarkable for the genealogy of a race of princes who exercised the sovereignty over part of central Hindustan in which the enumeration much exceeds that of any inscription yet discovered. A very moderate computation will place the origin of the family in the commencement of the seventh century, as if we allow an average of twenty years

to the reign of each of the fifty-two princes prior to Hridaya in 1617, we shall deduct 1040 years from that date, and consequently place the accession of Yádava Raja in 627: how far the whole detail is entitled to confidence cannot be conjectured, but the latter part of it is susceptible of confirmation. The fate of *Durgávati* called *Durgetti* by Dow is related in his translation of Ferishta with many interesting circumstances: she commanded the army against Akber's general *Asoph* after her son *Vira* had been dangerously wounded and compelled to quit the field, and when all was lost plunged a dagger into her bosom rather than fall alive into the hands of the enemy, (*Dow*, ii. 345.) After her death, and that of *Vira*, the principality was temporarily occupied by the Mohammedans, but the inscription confirms what the history only leaves us to infer, that it was not at that time permanently annexed to the dominions of the Mogul.

The inscription at Hansi derives some interest from its assisting in elucidating the history of *Prithu Rai* or *Pithaura*, as will be noticed in the remarks which the Benares inscriptions have suggested.

The circumstances relating to the discovery of the last named inscriptions are fully described in the extracts from the report presented by the Judge of Benares to Government, to whose liberality the Society are indebted for their communication.

I. INSCRIPTION FROM GARHA MANDELA.

Salutation to Ganésa. The fortunate Vishnu conquers.

In the province of Gádhá, there was a prince named Yádava[1] Ráya, a receptacle for the waters of battle; his son was Mádhava[2] Sinha, whose son was Jagannátha[3] from whom was descended Raghunátha[4], whose son was Rudra-déva[5]; his son was Vihára[6] Sinha, whose son was Nara[7] Sinha-déva, whose son was Surya-bhánu[8], whose son was Vásu-déva[9]; from him

was Gopálasáhi[10], from whom was descended Bhúpálasahi[11]; whose son was Gópinátha[12], whose son was prince Rámachandra[13], whose son was Suratána-sinha[14], whose son was Harihara-déva[15], whose son was Krishna-déva[16]; from whom sprung Jagat-sinha[17] whose son was Mahá-sinha[18] whose son was Durjana Malla[19], whose son was Yasaskarna[20] whose son was Pratápáditya[21], whose son was Yasas-chandra[22]. His son was Manóhara-sinha[23], whose son was Govinda-sinha[24], from whom was Ráma-chandra[25], whose son was Karnnotha-ratna-séna[26], whose son was Kamala-nayana[27], whose son was the prince Narahari-déva[28]; Ravi-sinha[29] was his offspring, to whom was born a good son named Tribhuvana-ráya[30], whose son was Prithivi Raja[31], whose son was Dáranti-chandra[32], whose son was Madana-sinha[33], whose son was Ugra-séna[34]; his son was Ráma-sáhi[35], from whom was descended Tárá-chandra[36], whose son was Udaya-sinha[37] whose son was Bhánumitra[38], whose son was Bhavani Sása[39], whose son was Siva-sinha[40] whose son was named Harinárá-yana[41], whose son was Sabala-sinha[42] whose son was Raja-sinha[43] whose son was Dádíráya[44], whose son was Goraksha-dása[45], whose son was Arjuna-sinha[46].

13. To whom was born Sangráma-sáhi[47], who was the fire of general destruction to the heaps of his cotton-like foes, and upon the appearance of whose majesty pervading the universe, the mid-day sun became as a spark.

14. Wishing to conquer this whole earth, he destroyed fifty-two fortresses, (considered) impregnable, by their ramparts, and bastions equalling the thunderbolt, and firm on the peaks of mountains.

15. The son of this gem amongst monarchs was Dalapati of unsullied fame, whose renown the lord of serpents (Sésha) was long anxious to chant, but whose mouths could not completely accomplish his praise.

16. Even those (princes) of morose dispositions continually embraced

the dust of the feet of (this monarch), whose hands were always moist with the waters of charity, (who was) intent on his remembrance of Hari, the protector of those in his power and the guileless cherisher of his subjects.

17. His consort, Durgávati was as prosperity itself to the fortunes of petitioners, beautiful, as the image of virtue, the acmé (boundary) of the good fortune of this earth.

18. Upon the decease of the Sovereign of the Universe, she installed her son, the fortunate Viranáráyana[49], three years old, in the seat of royalty.

19. By her own renown, famed in the three worlds, she made this whole earth, as it were to change its appearance; by immensely high golden dwellings, as an unlimited splendid Hémáchala, by the heaps of precious gems scattered every where, as a mine of innumerable jewels, and by the herds of frolicsome elephants, as possessing innumerable elephants of the lord of heaven.

20. Surely, she who daily presented, steeds, elephants, and millions of gold in unbounded charity, eclipsed by these high-famed acts the vast renown of the Kámadhenu.

21. Always intent on the protection of her subjects, she herself mounted on an elephant, in every field of battle, conquering her powerful adversaries, rendered useless the Lókapálas.

22. The fortunate Viranáráyana of infinite fame, entered manhood; and the dignity of this prince, diffused over the world, increased together with the portion of revenue requisite to be taken.

23. In the course of time, a mighty chief was dispatched by Akber,

powerful by the riches of the earth, and equalling Arjuna, for the tribute. He was disrespected by the prince.

24 and 25. Upon a battle taking place, this illustrious warrior, who made the earth bend beneath his vast army, and who had ever defeated his foes by his dreadful valour, was slain by hundreds of thousands of his adversarys' arrows. Durgávati, who was mounted on an elephant severed her own head with the scymitar she held in her hand: she reached the supreme spirit, pierced the sun's orb (obtained salvation.)

26. Chandrasáhi[50], the asylum of the unprotected, the abode of glory, the full lamp of the whole of his family, he whose wealth was fame, and the offspring of the prince Dalapati, was crowned (by the people.)

27. The females of his enemies quarrel with the trees in the forests: the trees first snatch off their garments, then with their thorns seize them by the hair. The women consume them with sighs, and observing by the (light of the) sun their uncovered bodies, harshly tear off the bark to clothe themselves.

28. As the six-faced god, was descended from the consumer of the god of love, so was a son named Madhukarasáhi[51] born to this prince. He was of unsullied renown, and a sea of glory acquired in this world.

29. By whose victories proclaimed by hosts of people, and accomplished by his strength of arm, the eight Dikpálas, are eternally ashamed: by the vibrating sound of whose double-headed drums, outvying the roar of the newly risen, but arrogant clouds at a general deluge, the exultations of his agitated and dispirited foes were silenced.

30. His son was the fortunate Prémanáráyana[52], the accomplisher of the wishes of the good, the corporeal energy of the mass of glory of the

kshetriyas; the abode of love; fame itself; the pride of his family; the wealth of the virtuous, the art of the Creator, the ocean of good qualities, and void of a path for evil.

31. His foes deprived of their repose by the first acquaintance of the light of his shining renown, and separated from their beautèous females, unto this day do not quit the mountain caves: and by his increasing troops of thousands of dreadful elephants, resembling heaps of clouds and whose brows were fragrant with the dew of passion, the mass of hills was either humbled or cleft.

32. In the field of battle, even the proudest monarchs should only be forcibly secured. Enmity should not exist: fame should be increased in this world, by charity unceasingly practised. There must not be any ostentation. To petitioners their request should always immediately be granted without any enquiry. These are the virtues of princes and these practises were proverbial of Prémasáhi.

33. The fortunate Hridayéswara resembling another new year was the son of this illustrious prince; he was the giver of happiness to the just, and the glory of his ancestors.

34. Although he rules over the whole world, yet he particularly cherishes the unprotected; a cloud though raining equally, waters a valley most abundantly with rain.

35. By him were presented, and confirmed (by grants) on neat copper plates, to the brahmanas, several villages encompassed by delightful groves, proud with splendid mansions well inhabited, abounding with pure lakes stocked with lotuses; pleasing from the continued noise in the temples (from the chanting of the védas, &c. &c.) and every where possessing extensive (lands) fruitful with every kind of grain.

36. He cherished the whole of his own extended dominion, pleasant, from the attachment to the worship of the immortals, and in which hypocrisy was never known.

37. The universe and every monarch was obedient to the wishes of Hridayésa, by whom were inscribed on a wall of gold, the fifty letters, resembling mighty elephants.

38. Who, when in chace, on foot, slew with an arrow, when springing on him, a mighty tyger, with forehead resembling a large dreadful serpent.

39. Regarding whom this is a saying of Indra; "Oh Arjuna, why are "you dispirited? Oh illustrious immortals! What; do you not know that "this prince Hridaya makes many brahmanas on the earth, equal to Indra?"

40. The consort of this monarch was named Sundari, the mansion of good fortune, and beautiful as that treasure, Virtue.

41. Through whom the earth was constantly filled with the enemies of the demons, dispelling the cause of the streams of poverty and pain, and was always (glutted) with the waters of real charity, with elephants resembling clouds, and (temples reeking) with streams of fragrant juice.

42. She cherished virtue by innumerable acts of holy munificence such as (causing to be made) large wells, gardens and reservoirs, and by numerous presents.

43. She caused this holy temple to be erected, and placed in it the (images of) Vishnu, Siva, Ganésa, Durgá, and the Sun.

44. Sankara is incompetent to the praises of her, by whom Sridhara

(Vishnu) and the other immortals are glorified, and have obtained a holy abode.

45. She caused the deities, Krishna, Vishnu, and others, to be continually worshipped in this temple, by brahmanas specially appointed, by offerings, banquets and riches innumerable.

46. The monarch Hridaya conquered greatly through her, who is praised for her excessive energy, and resembles the light of the moon.

47. This account of the race of this prince was framed by the learned Jaya Govinda by the order of Sukirtti, a preceptor of the Mimansa, and Vyákarana, and who by his own doctrines conquered logic, and is skilled in the whole of the védas and their members.

48. This temple was built by the skilful artists Sinhasahi, Dayarama, and Bhagiratha.

49. Written by Sadásiva in the year of the Sumbut æra, 1724, (A. D. 1667,) on Friday, the 11th day of the bright fortnight of the moon of the month of Jyeshtha, and engraven by the above artists.

II. INSCRIPTION FROM HANSI.

Salutation to Devi :—1. Let the enemy of Mura (Vishnu) protect you; of incomparable various forms by his mental contemplation of the members of Lakshmi. Her countenance a second moon: her arms the branches of the Parijata. The sides of her high and solid breasts the frontal globes of the immortal elephant (of Indra.) In this progressive manner did the hidden Sri appear when produced from the waters of the agitated-churned ocean.

2d. The prince Prithivi Raja was born in the race of the descendants of the moon : his maternal uncle was named Kirana, an increaser of his fame.

3d. He was as an autumnal moon, for an ornament to that firmament, the tribe of Guhilanta; and an ocean of those eminent qualities, gravity, munificence, and handsomeness.

4th. Having slain the warrior Hammira who was an arrow to the earth; the king who was a serpent to the riches of his enemies; acquainted with the qualifications of the assembly of heroes, and whose feet were cleansed by the contact of the mass of rays from the diadems of kshetriyas being delighted, presented to him, possessing pure virtues the strong fortress Ásikí.

5th. Having, for the purpose of battle, entered the lofty-peaked fortress, and having placed his foot on the heads of the armies of his foes, he was as the bestower of their wishes to those overcome by calamity. Travellers describing a celestial, and highly finished road, which he (Kirana) had made and which resembled the very heart (best part) of the earth; thus exclaimed, " Oh thou hero Hammira, where now is thy name and majesty."

6th. By the new revenues, arising from his victories, first the high road was finished, near it were two lofty buildings made of copper, &c. and also an apartment for the wealth of his enemies. " Having well considered, I " imagine that the celestial tree is Kirana's, certainly Tryambaka on whose " forehead, the moon appears, conquers in this world: who is another " Yama."

7th. But what can be said of the greatness of him, on whose account, Vibhishana the lord of demons sent a messenger who thus spoke, " In

"Lanka the prince of demons who has obtained a boon from contemplat-
"ing the lotus foot of Ráma, the pearl of the line of Raghu, thus confident-
"ly and respectfully addresses the fortunate Kilhana divinely seated,
"broad-chested, strong-armed, whose festivals are far-famed, and who by
"his unsullied glory has enlightened the three worlds."

8th. "The object was (the completion of) the bridge intended for bat-
"tle; and we both were in assistance with the warrior chiefs of the monkies
"and bears accoutred, day and night, and on which account Ráma having
"made five cities, presented me with this necklace and you have written on
"a leaf signed with your own hand the magnificence of your city."

9th. Oh thou hero! Hanuman thus writes, "That you possess wonder-
"ful valour, and that without a doubt the illustrious prince Prithivi Raja is
"Ráma."

10th. "Being born in the line of Guhilanta, your essential nature is of
"this kind. In this Kali Yuga, no one is attached to truth or morality."

11th. For as "Oh hero, when conquering nations, you first slew the
"forces of your foes, and then throwing your arms round the neck of their
"leader, seated on a mailed horse, held him fast. But it is unseemly to
"state all this before you, for it is improper to detail the beauty, learning,
"prosperity, eminence or misfortunes of the great."

12th. "By thee, best of Kshetriyas, is possessed strength, enriched with
"splendour (which has) rooted up, and then reinstated (your enemies) and
"a mass of unsullied fame (which shall last) as long as the celestial mov-
"ing sun shall shine, as long as the winds and firmament, the earth and
"sea remain."

13th. "What is the use of repetition: listen to my true words, Either ac-
"cept Lanka, or give me safety."

14th. "This string of jewels was presented as a respectful gift, by the "ocean preserving its own qualities, to the celebrated Ráma, preparing to "form his bridge."

15th. "And again, Kilavalha born in the tribe of Táda an image of "strength, and a slayer of the armies of all his foes (was) a bee to the "lotus feet of the fortunate Kilhana: his son Upaga was called on the earth "Lakshmana."

16th. "He was an excellent sage and by his devotion obtained the "abode of the three-eyed God. This fortunate Lakshmana, was always "the chief of those of composed minds."

In the year of Sumbut 1224, (A. D. 1168,) on Saturday, the seventh of the white fortnight of the month Mágha.

III. INSCRIPTIONS FROM BENARES.

In the beginning of 1823, seven plates of copper with Sanscrit Inscriptions were found by a peasant at work in a field near the confluence of the Berna nalla with the Ganges; they were delivered by him to the Magistrate and forwarded to the Government by whom they were presented to the Society: the following is the description of them as conveyed in Mr. Macleod's report of their discovery.

"The Inscriptions upon the six larger plates bear date 1234 and 1236 Sumbut (A. D. 1177 and 1179,) and are, I find, formal grants of land in the Sanscrit language under the seal and authority of Raja Jye Chundra.

"The seventh plate, of smaller dimensions than the rest, and found on

a subsequent occasion, but near the same spot, bears an inscription exactly of a similar kind, but of more remote date; being a grant of land by Sree Gobind Chundra (the grand-father of Jye Chundra) dated Sumbut 1177, (A.D. 1120.)"

TRANSLATION.

PROSPERITY.

1st. May the pride of Lakshmi, apparent at the commencement of her amorous dalliance, and in which her hands, wander over the neck of Vishnu, whose joy is uninterrupted, be the cause of our happiness.

2d. Upon the retirement into heaven of all other princes Yasóvigraha[2] a monarch of the solar race remained: he was most illustrious and munificent.

3d. He had a son named Mahichandra, whose unbounded fame resembling the splendour of the moon spread to the regions across the ocean.

4th. He had a son named Srichandra deva,[3] who delighted in the rules of Government, he overcame the circle of his foes, dispelling the darkness which had arisen from the valour of the adverse warriors. By the glory of his munificence he dispersed every particle of distress of his subjects and by the valour[4] of his own arm he conquered the unequalled kingdom of Kanyakubja (Kanoj.)

5th. He visited the holy Tirthas[5] of Kasi,[6] Kusika[7] and Ayodhya[8] and by repeatedly bestowing his own weight of gold[9] on the brahmanas he stamped the earth with hundreds of scales.

6th. His son Madanapala, the head gem of monarchs, and the moon of

his own race was a victorious prince; at the time of his inauguration, the dust (sin) of the Kali Yuga was cleansed by the waters from the jars used in the ceremony.

7th. Whenever he proceeded forth on his conquests, his wild elephants resembling huge mountains in their height, caused the globe to sink through the monstrous pressure of their steps; thus the palate of the serpent Sesha[10] being pierced by the jewel in his head, compelled him to vomit streams of blood, forcing him from the trituration, to hide his crest within his own breast.

8th. As the moon was produced from the ocean[11] so from Madanapala was descended Govinda Chandra; he was a prince of such vast strength, that by the grasp of his mighty arm, he was able to restrain an elephant of the kingdom of Navarashtra.[12] He possessed cows giving streams of the richest milk.

9th. His herds of elephants could never meet with equals for combat in three regions (the north, south and west) they therefore roved to the quarter sacred to Indra[13] (the east) seeking for Airavata.[14] They were like warriors seeking for their adversaries.

10th. From him was descended Vijaya Chandra, a monarch as famed for subduing sovereigns, as Indra[15] for clipping the wings of the mountains. He caused the affliction of this globe to be washed away by the streams of tears from the eyes of the wives of Hammira,[16] who was the abode of wanton persecution to different realms.

11th. His fame, free from all restraint, surmounted as in play the three worlds, and the magnanimity of his well-known renown has been described by the poets, partaking of the nature of the steps of the god Trivikrama,[17] his fame has caused dread to the demon Bali.

12th. When he moved forth to subdue the earth, bounded by the ocean, the whole globe as if distressed by the heavy pressure of his mighty and mad elephants, seemed from the mass of dust thrown up by the bodies of prancing horse as seeking an asylum at the feet of Brahma.

13th. The son of this monarch of wonderful power is Jaya Chandra[18] who resembles Náráyana descended on earth in the race of kings for the purpose of upholding the globe: princes desirous of averting the dread of continued imprisonment, throw aside all duplicity, abhor the thoughts of war, and with tranquil minds court his favor.

14th. When he prepares (for conquest) should the lord of serpents[19] whose strength is depressed by the firm weight of the juice flowing from the temples of the strings of his elephants like immense streams of agitated mountain rivers, being overcome by exertion, forget to seize the rim of the circle formed on the back of the tortoise by the friction (of the mountain Mandara) and on which play the thousand breaths from all his humbled hoods, he would be totally deprived of sensation.

His, Jaya Chandra's feet, are worshipped by the whole circle of Rajas, by the favor of the feet of Sri Chandra-déva, a mighty prince, emperor of emperors, who by his own arm attained the sovereignty of the fortunate kingdom of Kanyakubja. By the favor of the feet of the fortunate Madana-pála, a mighty monarch, a king of kings. By the favor of the feet of Sri Govinda Chandra-déva, a mighty sovereign, emperor of emperors, the lord of steeds, the possessor of vast elephants, the ruler of men, the monarch of three empires, the equal to Vachespati[20] in knowledge of various sciences. By the favor of Sri Vijaya Chandra, a glorious prince, ruler of kings, the lord of steeds, owner of mighty elephants, monarch of men, the sovereign of three empires, equalling Vachespati in knowledge of various sciences. He the fortunate Jaya Chandra, the victorious, the mighty monarch,

the emperor of emperors, the lord of steeds, the possessor of vast elephants, the ruler of men, the sovereign of three empires, the equal of Vachespati in the knowledge of various sciences, thus commands, causes to be made known, and decrees to all the inhabitants, to the headman, to the wife of the headman, to the young prince, to the minister, officiating priest, door-warden, commander of troops, to the keeper of the treasure, the magistrate, physician, and astronomer, to those belonging to the female apartments, to the chief amongst the elephant keepers, horse keepers, bird catchers, and of those who dig in mines, to cowherds, and to shepherds of the undermentioned villages. Be it known to ye all, that on Sunday, the fourth day of the bright fortnight of the moon of the month Pausha, in the year 1234, of the Sumbut æra (Anno Domini 1177) when the sun was to the north of the equator, I, Jaya Chandra, having first bathed in the Ganges, at the holy city of Varanasi and having offered water in the prescribed manner, to the mantras, to the deities, holy saints, mortals, to the Bhutas,[21] and to the classes of Pitris;[22] having also paid homage to the sun, whose glory dispels all darkness ; having worshipped the deity whose crest is a portion of the lord of plants[23] (the moon); having performed adoration to Vasudéva[24] the nourisher of the three worlds ; having made offering of an oblation of rice, milk and sugar to fire ; have in order to increase my own virtue as also to add to that of my parents, bestowed on the fortunate Rau Rashtradhara verma[25] kshetriya, (of the lineage of Vatsa, and of the five families of Bhargava, Chyavana, Apnuwan, Aurva and Jamadagnya,) grandson of the most noble Thakkur Jagaddhara, and son of the most illustrious Thakkur Vidhyadhara, the undermentioned villages ; having given a grant to that effect as long as the sun and moon shall exist, viz. on the opposite side of the river Devaka (Saryū) the villages of Laualli, Sarava, Tatalia, Naugama and Dakshapali, in the Pergannah of Ambee alli,[26] dependant on Dhawaharadiha, together with all land and rivers therein; all mines of iron and salt, all fish ponds, ravines and barren lands, hills, forests and hidden treasures, also all plantations of Madhuka[27] and mango trees, gardens, clumps and grasses of every description which may come within observation, including every

thing above and below, free (from all claims) in every direction, as far as the boundary lines extend.

(Here follows a mantra which appears to instigate the bestowing of gifts according to the individual's ability. I however am unable to explain it.) On the subject of the mantra are the following couplets:

1st. He who accepts land and he who gives it are both performers of a virtuous[28] deed, they both assuredly obtain heaven.

2nd. Oh Purandara,[29] the conch, a throne, an umbrella, noble steeds, and fine elephants are the signs of having bestowed land, they are the reward.

3rd. Rama Chandra thus solicits all those monarchs who may reign[30] in future (that is, after him,) "Bestowing of land is the common road to virtue amongst princes; do ye all practise it accordingly during your reigns."

4th. "When my race may become extinct, let whoever may be the monarch, to him do I join my hands requesting he will not set aside this grant."

5th. "This earth has been enjoyed by Sagara[31] and numerous other monarchs to whomsoever the soil at any time belongs, to him at that time belong the fruits of it."

6th. "He who forcibly seizes a single cow, a single swarna, or even a "single finger's breadth of land *given in a present*, dwells in the infernal re-"gions for a period of fourteen Indras."[32]

7th. "A depriver of land *bestowed in gift* cannot expiate his offence by digging one thousand tanks, or by the virtue which results from the performance of an aswamedha;[33] not even by presenting ten millions of cows."

8th. "He who seizes land which has been given by another or by himself becomes a maggot in ordure, and sinks, taking with him his ancestors."

9th. "A bestower of land resides in paradise sixty thousand years, but he who seizes it, as also he who allows the seizure, resides in hell for the same period."

10th. "The wise have said that poison is not to be considered as poison, but they have determined that the property of the priests is *the real* poison, which if taken destroys sons and grandsons, whereas poison annihilates only him who swallows it."

11th. "A seizer of wealth which has been offered to the gods, and a seizer of property bestowed on Brahmanas are reborn black serpents, and reside in the holes of withered trees, in forests void of a drop of water."

12th. "Whatsoever donations (and they cause virtue, prosperity, and renown,) have been presented by former sovereigns, must be considered when once given as ejected *food;* what holy man would ever take them back?"

13th. "The dominion over this earth resembles the play of the winds and clouds. The enjoyment of one's faculties is only for the moment; the life of mortals is to be compared to a drop of water on a blade of grass. Faith is the best friend in the attainment of bliss."

This copper plate is inscribed by the renowned Thakkar Sripati.[34] May there be happiness and great prosperity.

NOTES AND OBSERVATIONS BY THE TRANSLATOR.

1. Lakshmi, the consort of Vishnu and goddess of wealth and prosperity.

2. In the 9th volume of the Asiatic Researches mention is made by Mr. Colebrooke of a grant of land made by Jaya Chandra Raja of Kanoj. It was inscribed on a plate of copper, a transcript of which was presented to him by a Pundit named Sarvaru trivedi, who stated that he had been employed in decyphering it: the original is in England: the first name in the ancestral line as decyphered by Sarvaru is Sripala, whose son was Mahi Chandra. The six plates have been examined in a most attentive manner, and no construction which could possibly be forced could tend to fix the term "Sripala" as the head of the genealogical list: indeed the term is not even introduced epithetically which often is the case; we may therefore reasonably infer that the Pundit did not pay attention in making his transcript: another mistake also occurs regarding Vijaya Chandra-déva which will be mentioned in a note on the same: with these two exceptions the list of royal names in the grant mentioned by Mr. Colebrooke corresponds with that of the present grant. In a grant found at Khara, Yasopála is mentioned as conferring a gift of land in Sumbut 1093 (A. D. 1037) is he the same with Yasovigraha?

3. The purport of the 4th and 5th stanzas corresponds most exactly with that given as the great character of Sri Chandra-déva by Sarvaru trivedi.

4. Mr. Wilson in a note to a passage in the preface to his Sanskrit dictionary advances as a mere etymological speculation, (when determining the date of the composition of the Viswaprakasa, a lexicon by Maheswara descended from Sri Krishna, physician to Sahasánka, king of Kanoj,) that Sahasánka may possibly be a title of this Sri Chandra-déva, and wishes that the original of the passage inserted in the 9th vol. of the Researches by Mr. Colebrooke could be examined. Mr. Colebrooke reads, "which realm (Kanoj) he Sri Chandra-déva acquired by his own strength." The passage on the plate now transcribed is this, "Sri Madgadhipuradhi rashtramasamam

dorvikramenárjitam," literally, "the unrivalled kingdom the fortunate Gadhipara (Kanoje,) *was* gained by the valour of his arm."

5. Any holy spot; but more particularly places of pilgrimage situated on the banks of the Ganges.

6. Benares.

7. The river Kusi (Koosi) in Bahar; Satyavati, the sister of Veswancha, was married to Richika, a holy saint. Richika had prepared an oblation which he had consecrated with mantras: when he went to bathe, Satyavati gave part of it to her mother, and her mother in return gave her some food she had prepared. Satyavati brought forth Jamadagni, but she herself was transformed into the river Kausaki (Koosi.)

8. The modern Fyzabad in Oude.

9. The ceremony of being weighed with gold and then distributing the amount amongst the Brahmanas was common to Hindu princes in former days. The ceremony is termed Tuladan and His Highness the Raja of Tanjore in 1821, was weighed in this way, and afterwards gave away the amount in charity, at Benares. Mohammedan princes were also weighed in the same way with all the paraphernalia of royalty on the Noroz. In the Tozuk Jahangiri written by Jehangir himself is an account of his being weighed. The Mohammedans however did not distribute the amount, as the crown jewels always formed a portion of the valuables against which they were weighed.

10. Sesha is the lord of serpents, the earth is upheld by resting on his hoods. The Hindus suppose that all serpents have a jewel of inestimable value in their crest which accounts for this forced description.

11. The moon is descended from the ocean of milk. A ray of glory from the eye of the holy saint Atri, was so effulgent, that the eastern quarter could not endure it: it was accordingly thrown into the ocean where it became the moon. When the gods and infernals churned the ocean for the liquor of immortality, the moon was one of the fourteen inestimable gems produced. In Hindu mythology Soma, or the moon, is a male deity; the legend is fully detailed in the Mahabharata.

12. Navarashtra a country in the south of India mentioned in the chapter of the Mahabharat detailing Sahadéva's conquests.

13. Indra is the protecting deity of the eastern region.

14. Airavata; the name of Indra's elephant; he was produced from the ocean of milk when churned by the gods and infernals. (See note 11th.)

15. The whole of this verse is a play on words: the effect is lost in the translation. The hills in former days were supposed to have wings, and to amuse themselves by flying about, reducing to powder all countries in which they might alight. Indra in order to preserve the world from utter destruction, clipped their wings with his thunderbolt, and fixed them in their present positions, excepting the mountain Mainaka which took refuge in the ocean.

16. Hammira, a king of Sakambhari, or Mewar. He was by this a great tyrant. Mention is made of him in an inscription dated 1220 of the Sumbut æra (Anno Domini 1163,) by Col. Wilford in his essay on Vikramaditya and Salivahana.

17. Trivikrama, a name of Vishnu; it signifies "three steps or paces." The demon Bali had forcibly taken away the kingdom of the deities; Aditi, the mother of the gods, at the injunction of her husband Kasyapa, fasted

for twelve days, and from that holy action Vishnu was generated: after the subversion of the celestial kingdom, Bali, attended by Sukra, his officiating family priest, was performing a great sacrifice on the banks of the Narmada at a place called Bhugu-kaccha, the modern Baroach. Vishnu having taken the form of the dwarf (his fifth incarnation) went to the spot and begged for alms. His appearance was so effulgent that those employed suspended all action, wondering who he could be, some saying that *fire* had honored the ceremony; others that it was the sun himself, &c. &c. Vishnu commenced a recital of the Sam-véda; Bali exclaimed that he must be a holy Brahmana and demanded his wishes; the dwarf said all he required was as much earth as he could encompass with three strides. Bali thought this a curious request, he however granted it, and when about to seal the promise with a vow, Sukra forbade him, telling him that he recognized Vishnu; Bali however still determined to fulfil the promise, and Vishnu in three strides passed over the whole earth: Bali will be Indra in the eighth manwantara.

18. Jaya Chandra was king of Kanoj and Benares. Mr. Colebrooke in the 9th volume of the Researches makes him the same as Vijaya Chandra. This is evidently wrong from the express statement that he was born from Vijaya Chandra: Jaya Chandra went on a pilgrimage to Sinhala (Ceylon) and received from Virabhadra, king of Sinhala, (whom by the by he conquered) a most beautiful female: Prithivi raja (commonly called Pithaura) the last prince of the Chauhan dynasty, already enraged at Jaya Chandra from a supposed assumption of having undertaken a sacrifice at which Prithivi raja ought to have been allowed to preside, was exasperated at this, and a long and bloody war took place between the parties: this lasted until Anno Domini 1192, when Sahebuddin invaded the dominions of Pithaura: Jaya Chandra entered into a league with the invader, and Pithaura was slain in desperate battle fought on the plains of Thanesar. The alliance between Sahebuddin and Jaya Chandra did not last long, for in the year 1194 a great battle was fought between them near Etawa in

which Jaya Chandra's army was totally routed; he himself was obliged to flee, and in attempting to cross the ganges in a small boat, was drowned.

19. Sesha; to understand this passage it is necessary to suppose the large mountain Mandara fixed on the back of a tortoise and pulled backwards and forwards by two opposite parties, thereby making an indentation on the tortoise's back: the story to which the passage alludes is thus told:—The earth rests on the hoods of the serpent Sesha, beneath whom, at a considerable distance, is the Kurma, or tortoise; when the mountain Mandara was removed into the ocean by the deities and infernals in order to churn for the amrita or liquor of immortality, it sunk: they were sorely afflicted and Narayana from compassion having assumed the form of a tortoise uplifted and supported it. The gods and infernals then using Vasuki as a cable, churned the ocean, with the mountain Mandara, the continued friction of which, indenting the part of the tortoise's back on which it rested, caused a rim.

20. The preceptor of the gods; he is the son of Angiras.

21. A particular class of demi-gods.

22. The manes of ancestors.

23. The moon is named Oshadhipati, "the lord of plants (annual.")

24. Vásudéva, a name of Krishna.

25. The grant was made to one of the Rajputra tribe, as is fully proved by the term Varma peculiarly applied to that tribe. This is in direct violation of every precept; for all grants of land ought to be made to Brahmanas exclusively. It must be supposed in order to obviate the apparent

incongruity that Ráshtradhara was of the race of Brahmanas termed Zamindar Brahmanas, who are looked on as inferior Brahmanas. They are also termed Bhumihára Brahmanas. The present Raja of Benares, Udita Narayána, is one of this cast: they are considered both as Rajputras and Brahmanas, and in their former capacity are allowed to hold the reins of Government which, as Brahmanas exclusively, they could not.

26. Perhaps the province of Amodah on the north bank of the Saryu?

27. Bassia latifolia; the fruit of which affords a spirituous liquor. It is often used as a condiment by the natives, in their food.

28. This verse is in the Mitakshara of Vijnyaneswara. Mr. Colebrooke suggests the age of the Mitakshara to be above 500 and within 1000 years. The verse is quoted by the author of the Mitakshara, but anonymously.

29. An epithet of Indra; the conch, umbrella, &c. are the insignia of royalty.

30. The whole of this verse, as also the whole of the 8th verse are literatim the same as two verses on a plate of brass found at Chitradurg, containing a grant of land by a king* of Vidyanagara conferred Anno Domini 1395. Many of the Pandits at Benares have also assured me that the same verses are to be found on an ancient copper plate, being a grant of land by the famous Rama Chandra, king of Ayodhya. This plate was found at Ramkota in the very center of the modern city of Fyzabad, some centuries ago, and by which, *as they relate*, the Mohammedan Emperor restored land which his generals had seized.

The same stanzas are also on plates of a grant made by Buccaraya, prince

* Dewul roy?

of Vidyanagar dated Anno Domini 1409. They were seen at Nidigal and Goudja: they also are found on the plates preserved at Conjeveram and in a grant of land found at Tanna.

31. Son of Vahuka, a great prince; when Vahuka died, his queen wished to ascend the funeral pile with him, but the Muni Urva, aware that she was pregnant, would not allow her. The other wives of Vahuka in spite administered poison to her; the wished for effect failed, and when a son was born he was named Sagara "born with a portion of poison in him." The legend is in the 9th section of the Bhagawat, also an account of his numerous sacrifices, &c.

32. A period of time embracing seventy-one revolutions of the four yugas or ages.

33. The sacrifice of a horse, a most royal and expensive ceremony performed by the ancient Hindu Rajas. It is reckoned so virtuous an act that the crime of slaying a Brahmana can be expiated by its performance.

34. I am not exactly positive as to the true interpretation of this very material point as to who was the inscriber of the plate; the sentence contains an uncommon expression or two.

The six large plates were found near the conflux of the Varana (a small stream running past the north of Benares) with the ganges. They are generally in size about twenty inches by sixteen. A thick iron ring goes through the upper part to which is attached a bell-shaped seal; in the centre is the name of Jaya Chandra and above the name an image of Ganésa, below the name a conch. The inscriptions on the plates are exactly similar, only

differing in the name of the villages. One of them also has Sumbut, 1236; two years posterior to that of which this is a transcript.

The small plate is a grant of the village of Kavanda-gram in the Pergunnah of (or dependent on) Ambulila-pattala, to a Brahmana named Vasishtha Sarman. It bears date Sumbut, 1177, (or A. D. 1120.) The village was bestowed by Sri Govinda Chandra, a king of Kanoj; he was father of Vijaya Chandra and grand-father of Jaya Chandra by whom the grant of land dated A. D. 1177, was made.

The exordia and contents of the whole of the plates are exactly similar, excepting the dates, names of villages, donor and donee's names.

Historical Remarks on the preceding Inscriptions by the Secretary.

The Inscriptions now presented to the Society, and other authorities, to be met with for the most part in the preceding volumes of the Researches, enable us to form a tolerably satisfactory idea of the series of princes who reigned at Kanoj and Dehli, in the period that intervened between the first aggressions of the Musselmans and the final subversion of the native states in the upper parts of Hindustan.

The present inscriptions relate to the dynasty of Kanoj, which terminated with Jaya Chandra, the last of the series, in 1192. The names may be thus recapitulated, assigning to them the dates which we may venture safely enough to compute from those of Govinda Chandra and Jaya Chandra, as specified in their grants, and that of Vijaya Chandra in another place, (A. R. ix. 442.)

Yasovigraha, - - - - - - - - - - - -	A. D. 1024
Mahi Chandra, - - - - - - - - - - - - - -	1048
Chandra-déva, - - - - - - - - - - - - - -	1072
Madanapála, - - - - - - - - - - - - - -	1096
Govinda Chandra, - - - - - - - - - - - - -	1120
Vijaya Chandra, - - - - - - - - - - - - -	1144
Jaya Chandra, - - - - - - - - - - - - - -	1168

The length thus assigned to these reigns averaging 24 years, is founded on what appears to be the actual duration of the three last, although Jaya Chandra met with a violent death. Thus amongst the present inscriptions, is one recording a grant by Govinda Chandra which is dated in Sumbut, 1177, or A. D. 1121, the others are dated 57 years subsequent or A. D. 1178 giving that interval for the two reigns or 28 for each, whilst the reign of Jaya Chandra himself was not terminated till 16 years later or 1192. Supposing therefore the reign of Govinda Chandra to have commenced only one year prior to the year of his grant, the total period of the three reigns is 72 years or 24 each; one of these also as observed being cut short by a casualty, it is not extravagant to suppose that the preceding reigns averaged a similar duration, and that the dynasty commences at the date assigned to it: a period quite compatible with the rise of a new ruling power in that part of India which appears to have been the scene of its subsequent ascendancy.

There is nothing that furnishes any information relating to the country over which the first named prince Yasovigraha ruled: the late Col. Wilford speaking of *Jaya Chand* designates him as a *Rathore* Rajput apparently on the authority of a Hindi popular treatise, the Prithu Rai Cheritra. This is in harmony with traditions current still in Rajputana which derive the present Rajas of Jodhpur, who are of the Rathore tribe from the last princes of Kanoj: many of the leading feudatories or Thakurs of Oodypur and Jaypur are also Rathores. If we can suppose, which is not improbable, that the country generally west of the Jumna and south of Aj-

mere or Meywar, Marwar, &c. was the original seat of the Hindu tribe at the time of the Mohammedan invasion, we may suspect that *Yasovigraha* was a military adventurer from that quarter. It is clear that he was not king of Kanoj, for that city, it is said in the inscription, was the conquest of his grandson Chandra-déva; neither was he king of Benares for we find a Bauddha prince named *Mahipála* reigning there, as included within the limits of the kingdom of Gaur, in the year 1027, and his sons Sthirapála and Kamapála constructing edifices dedicated to Buddha of which the remains are yet conspicuous at Sarnatha (A. R. v. 433 and ix. 203.) Capt. Fell suggests the possibility of his being the same with Yasopála a prince of Kausambi who is mentioned in a grant found at Khara in the Doab (A. R. ix. 433;) this seems not improbable, the date A. D. 1037, would bring the prince rather later than above computed, but not so much as to affect the average materially: the imperfect state of the Khara inscription however throws no light upon the history of this prince, or records any thing of Yasopála except his name and date: the chief difficulty is therefore the difference of the latter member of the name, enhanced by this consideration, that, *Pála*, though not invariably, is often a family appellation and that the family denomination of this dynasty appears to be Chandra. Whether however he be the same with this prince is of little importance: it is scarcely doubtful that he was the first of the family who attained any consequence, as besides the evidence to this effect furnished by the genealogy, the phraseology of the inscription implies the same when it specifies that he "was or existed after the lines of princes had gone to heaven:" he was therefore in all likelihood either a military feudatory, or a martial adventurer, who availed himself of the disorganization of the petty principalities of the Doab, consequent upon the devastations of Mahmud to lay the foundations of a royal dynasty.

The second in descent from Yasovigraha appears to have been the first of the race who acquired a right to the title of royalty, and established his family on the throne of Kanoj: the exaggerated language of flattery

repeated by traditionary exaggeration has converted this kingdom into the empire of all India, and the contest for this imperial throne according to Wilford, (ix. 171,) was the cause of the last great war in India: that a war was excited by a dispute for pre-eminence between the princes of Dehli and Kanoj, inflamed by their being members of different rival tribes, is probable enough; but it can scarcely be believed to have had much influence on the general state of Hindustan: we cannot suppose that either Bengal or the Dekhin was conscious of a struggle between two princes, who appear only to have shared the dominion of a comparatively limited tract with many others, possibly subordinate but not dependant, and who appeared in the field against the Mohammedans, as the allies not the masters, of the princes of Merat, Gualior, Kalinjer, Mathurá, and Bindrabán.

That Kanoj however had long been a city of great celebrity and the capital of an independant and important state is undeniable: as Kanyakubja it is the subject of an ancient though absurd legend in the Ramáyana, and as Kanogiza it has a place with something like accuracy in the Tables of Ptolemy. It gives a designation to a principal division of the Brahmanical tribe, and is said in the history of Cashmir to have supplied that province with Brahmans at a very early date: according to Firdausi, a king of Kanoj called Shankal, was cotemporary with Behram Gor or reigned in the 5th century. Col. Wilford says the whole of India was subject to the princes of Kanoj in the 8th century, (ix. 200,) but according to the Raja Taringini Yasoverma who was prince of Kanoj in the beginning of the eighth century was dispossessed of his dominions by Lalitaditya, sovereign of Kashmir: this subjugation must however have been merely temporary for a prince named *Sáhasanka* must have occupied the throne about the middle of the tenth century as *Mahés'wara* the author of the *Viswaprakasa* in the year 1111, makes himself sixth in descent from the physician of that monarch: in the early part of the eleventh century Mohammedan writers call the king of Kanoj *Kora:* this prince after being overcome by Mahmud was admitted to an alliance with him, and in consequence incurred the enmity of his coun-

trymen. He fell a sacrifice to their combined resentment but his death brought back the Ghaznavi prince to the Doab, and he appears to have exacted severe retribution: the confusion consequent upon his march through the Doab to Benares and even to Behar if not to Bengal (ix. 203) afforded a favourable opportunity for the rise of an enterprising character such as we have already suggested Yasovigraha to have been. Amidst these troubles the power of Kanoj must have especially suffered, and it is not astonishing therefore that in some twenty or thirty years from the transactions adverted to, it should have become the prize of a new foe and owned Sri Chandra-déva as its lord.

The inscription states that this prince visited the Tirthas of Kasi, Kusika and Northern Kosala, and the expressions used as well as the character of the individual, indicate his visiting Benares, Gorakhpur, Tirhut and Oude as much for purposes of conquest as of pilgrimage. It was this prince then who in all probability overturned the authority of that dynasty which seems so long to have exercised an extensive sway in gangetic Hindustan; the *Pála* princes of Gaur: in that case however the Sri Déva-pála of the Mongir inscription could not have lived later than the Mohammedan invasion as supposed by Col. Wilford, (ix. 205 and 208,) as unquestionably the power of the race was too much curbed by the new princes of Kanoj for those of Gour to have undertaken an invasion of the Panjab as mentioned in that inscription: without therefore concluding that the date as printed in the Researches is correct it seems likely that Deva-pála Déva was long anterior to the Pálas of Benares and the disappearance of this name from amongst the princes of India. If as supposed by Col. Wilford the Sthira Pála of the Benares inscription (vol. ix.) is the Dhír Pal of Abulfazl (Ay. Akberi, ii. 24) and consequently was followed by a succession of princes of the same family appellation, they must have reigned over limits much more contracted than those they governed when the buildings at Sarnath were erected: the identification is however very doubtful for the lists of Abulfazl give fifteen princes between *Dhirpal* and the conquest of Bengal by Bakhtyar

Khalji, or according to the date of the Sarnath inscription and of the Musselman invasion between 1027 and 1204 or less than twelve years to a reign: we cannot therefore place any confidence in this approximation, and must infer the Dhirpal of the Ayin Akberi and Sthirapála of Sarnath to be different individuals: we are by no means restricted to the former, for the dynasty under discussion as the grant found at Amgachchi in Dinajpur furnishes a still more copious list, (ix. 434.) Agreeably to that authority it seems more safe to conclude with Mr. Colebrooke that the period of the Mongir grant, when the power of this family was at its heighth, must have been the eighth or ninth century at least. To save the trouble of reference it may be as well to insert the names of this dynasty here as they occur in these several inscriptions.

Amgachchi.	*Mongir.*	*Budal.*	*Benares.*	*Abulfazl.*
Lokapála.	Gopála.			Bhupála.
Dhermapála.	Dhermapála.			Dhírpál.
	Devapála.			Devapála.
Jayapála.				Bhupatpála.
Devapála.				Dhanpatpála.
				Viganpála.
Naráyanapála.				Jayapála.
				Rajapála.
Rajapála.		Rajapála.		Bhogapála.
—— pála Déva.		Surapála.		Jagadpála.
Vigrahapála Déva.		Naráyanapála.		
Mahipála Déva.			Mahipála.	
Nayapála.			Sthirapála.	
Vigrahapála Déva.			Vasantpála.	

The conqueror of Kanoj is succeeded by Madanapála, another warlike and victorious sovereign, and his successor bears a similar character; he is said to have extended his conquests to the east, no doubt beyond the Déva on the banks of which some of the lands granted by Jayachand appear to have been situated.

The son of Govinda Chandra is Vijaya Chandra, a grant by whom has been noticed by Mr. Colebrooke, (ix. 441,) dated in 1164, as Captain Fell has observed in his notes: the present inscriptions supply all that was left uncertain by the grant alluded to, the original of which having been sent to

England, it was only known to Mr. Colebrooke by a copy of it made by the Pundit employed to decypher it: this grant agrees precisely and apparently literally with the present, except in the first name and the last, or Vijaya-déva in place of Vijaya Chandra, the ancestor of Jaya déva, not the same prince as Mr. Colebrooke has stated.

Vijaya Chandra is celebrated in the inscription for the pangs he inflicted on the wives of Hamvira or as Capt. Fell writes *Hammira;* this expression implies his having slain a prince so named but such an interpretation is rather questionable as it is not easy to particularise the prince so denominated. To one Hammira a very popular character in Hindi poetry and tradition, the passage is of course inapplicable, as he did not live till long after the date of the grant, or in the 14th century, (A. R. ix. and x.) A chieftain of the same name is mentioned in the inscription found at Hansi, which fortress it is said was made the government of Kilhana the uncle of Prithivi Raja in reward of his slaying Hammira; this inscription is dated 1168, and so far tallies well enough with the existence of Hammira as the cotemporary of Vijaya Chandra, but Hammira could not be twice exterminated, and we have either two individuals of the name alive at the same time, and both obnoxious to Hindu princes, or we must suppose that the king of Kanoj only annihilated the power of Hammira, and left his death to the ruler of Ajmere. After all however there seems a more simple solution than either, and *Hammira* is nothing more than *Mir* or *Amir*, a Mohammedan prince or general. Consistent with this is all Musselman history which mentions the capture and recapture of Asi or Hansi several times, between the first and last invasions of Hindustan, and the character given in the inscription to Hammira who is there styled "the Harasser of various realms." The inscription to which Capt. Fell refers includes no notice of Hammira, (A. R. vii. 130): the only connexion between his name and it, is the mention it makes of the Sakambhari princes of Dehli in a stanza quoted in the Sarangdhara Paddhati, a collection of miscellaneous verses compiled two generations after Hammira, prince of Sakambhari, but this is

most probably the later Hammira, the prince who lived in the 14th not in the 12th century, and has no relation with the name that occurs in the Benares inscription.

The inscription at Dehli thus referred to is the *Nágari* portion of that upon the Lát of Firoz Shah, translated by Mr. Colebrooke: it is dated in Sumbut 1220 or A. D. 1164. This records the occupation of Dehli by the Sakambhari princes, and there is little doubt that Sakambhari is the same with *Sambher* in Ajmere, as Mr. Colebrooke supposes, or at least that it is *Amber* the ancient capital. The inscription calls the princes also *Chahuvanas* or *Chouhans*, the tribe of Rajputs still numerous in that part of Rajputana, as well as in other places, and giving name to a small principality still called the Chouhan Raj adjoining to Jodhpur. The traditionary histories of Jaipur or anciently Amber further confirm a connexion between this state and Dehli; for one of the ancestors of the present ruling family was married it is said to the sister of Pithaura. It appears therefore that soon after one martial clan the Rathore Rajputs had established a sovereignty for themselves at Kanoj, another tribe of Rajputs, the Chouhans, succeeded in extending their power from Ajmere to the upper portion of the Doab and Dehli. The inscription on the staff of Firoz Shah was engraved either in the reign of Visala-déva or of his immediate successor Vigraha Raja-déva, if the same person be not intended by both names; the father of Visala-déva is *Vella-déva* or *Bella*, and he may probably be the same as the *Bil Deo* the *Chouhan*, of the *Ayin Akberi*, who conquered the principality of Dehli. Abulfazl it is true, places this event in the ninth century, but his list of the princes of the dynasty contradicts his own statement. Pithaura, the seventh and last, was killed in 1192: the aggregate of the seven reigns, is made in the Ayin Akberi 83 years, which being deducted from the date of Pithaura's death, brings us to 1109 for the era of the Chouhan conquest; this agrees well enough with the date of the inscription on the *Lát*, which alludes to a third or perhaps only a second generation anterior to 1164, and consequently places Vella-déva in the period at which Bil Deo must have lived according to the Ayin Akberi.

The date of the Hansi inscription, 1168, shews that Prithivi Rai or Pithaura must have succeeded to the supreme authority, immediately after the inscription on the Lát was engraved: at the same time it is to be observed that Prithivi Rai although styled by Abulfazl, king of Dehli, appears not to have held that station or at least not to have exercised the sovereignty personally. The Tebkat Akberi and Ferishta call him prince of Ajmere, and his brother Kanda Rae, king of Dehli: it is possible therefore that the Sakambhari princes still resided on their original dominions, and merely governed Dehli by delegates: that a close connexion however subsisted between the two, is indicated by the inscription on the Lát, as well as by the relationship between Pithaura and Kanda Rae. Both brothers perished in the last engagement with Moiz-ud-din; Kanda Rae on the field, and Pithaura was put to death after the battle. The appearance of two or three princes of the Chouhan race at Delhi according to the inscription on the Lát, immediately anterior to Pithaura, is fatal to the story Col. Wilford cites from the Prithivi Rae Cheritra (A. R. ix. 171) of the adoption of that prince by Ananga Pála, the last of the Tomara dynasty of Dehli kings in 1170, the last of whom according to Abulfazl, also named *Prithivi Raj*, was defeated and expelled from the sovereignty by Bil Deo as already observed.

The inscriptions that have given rise to these observations are with one exception records of grants made in the reign of Jaya Chandra, the last of the rival house of Kanoj who survived but a very short time the downfall of that of Dehli, to which he contributed not only by previous contests for pre-eminence, but even if the Musselman writers are to be believed, by an actual alliance with the invaders.

The circumstances thus ascertained from these antient records satisfactorily account for the rapid progress of the Mohammedan arms. Instead of employing the interval between Mahmoud of Ghizni and Mohammed Ghori to confirm and establish friendly connexions, the Western princes

seem to have thought it a favourable opportunity for aggrandising themselves at the expence of those neighbours whom the aggressions of Mahmoud had left exhausted and exposed: a century and a half was consumed in this unprofitable scramble, and when the Mohammedans returned to the charge they had to encounter only princes who were yet loosely seated on the spoils of their predecessors, and were disputing amongst themselves the appropriation of the booty.

IX.

Observations on the Climate of Subathu and Kotgerh.

By Lieut. P. GERARD, Beng. Nat. Inf.

AS Meteorology is now considered by scientific men in Europe of great importance in every point of view, and of late years is become a subject which has excited an unusual degree of interest; it has occurred to me that the following Weather Journal comprising a period of nearly sixteen months, from the 17th of September, 1817, to the end of December, 1818, may not be deemed unacceptable to those who devote a portion of their time and attention to this particular branch of science.

The observations made have been principally taken at Subathu and at Kotgerh with some others at intermediate places of encampment during the march, or a temporary halt; and as the journal in detail may seem too voluminous for publication, I beg to offer an abridgement of it.

The abridgement notes the highest, lowest and mean of each day in every month, inclusive of the observations taken during a temporary halt for the period above-mentioned : and for reference, a list of the places with their heights above the level of the sea, and their latitudes and longitudes will be found at the end.*

The difficulty at all times experienced of being able to procure proper instruments in India for keeping a correct and regular Meteorological Journal has been a great drawback in the present instance ; and the uncertainty of obtaining them from Europe in an efficient state has necessarily confined the observations for the most part to the Thermometer: but considering all things ; the peculiar nature of this mountainous, elevated and highly interesting tract of country, and the want of thermometrical registers in this parallel of latitude, being the first complete set ever offered, it is to be hoped that it may not be found unworthy of attention.

The observations at Subathu have been limited, with very few exceptions, to the interior of a house which has an exposed situation, and will give a very good mean, while those at Kotgerh have been taken outside, in the shade, exposed to the wind, so as to shew the true temperature of the atmosphere. After procuring and putting up a Barometer at the latter place, observations of the Thermometer were taken inside as well as out, marked "Attached and Detached" in the column. The Barometer used was unexceptionable in every respect, being a good tube filled with mercury, accurately boiled over a slow charcoal fire, and after extracting by

* I am indebted to my brother Captain A. Gerard, late Surveyor to the Board of Commissioners in the Ceded Provinces for the latitudes, longitudes, and heights, of the different places above alluded to.

this tedious, troublesome, and not unfrequently vexatious process (but not without breaking some tubes before succeeding) all the air bubbles and filth, was inverted into a cup of mercury to which was affixed a scale graduated into inches, tenths and hundredths parts. It may therefore be depended upon, and great care was observed, at the time of taking the observations, whether of the Barometer or Thermometers.

It is necessary to state that the mean of observations taken at intervening places where a temporary halt was made, has been deduced from the highest during the day, and the lowest the following morning, being the only mode left for ascertaining a correct mean of the place for the day.

Subathu is a small fort and military post occupied by the 1st Nasírí or 6th Local Battalion or Hill Corps, in North Latitude 30° 58' and East Longitude 76° 59', about 4,205 feet by barometrical observation above sea level, and about 3,000 feet above the protected Sikh states in the plains of Hindustan. It is situate in the Pergunnah of the same name and was comprised in the state, Thakurai or Lordship of Keunthal, but at the termination of the war with the Gúrkha power was ceded to the British Government.

The horizontal distance from the plains of Hindustan is 10 miles, being separated from them by two intermediate ranges of lower hills; from the Himalaya or snowy chain about 65 miles the nearest point; from the River Setlej or Satrudra 24, and from Kotgerh 40.

It is a sort of flat or table land having mountains in the neighbourhood in height from 4600 to 8000 feet above the sea. It is open and exposed, being low and near the plains, and in some degree is liable to the effects of the hot winds which blow from the plains during April, May, and June, although the intermediate ranges are considerably more elevated. It is on the right bank of a branch of the small river Gambhir which lies to the

South West and flows 1,100 feet below it, distant about one mile in a straight line. It is very steep towards the South West, and North East sides and to the South East and North West is a range, the former rising in elevation, and the latter gradually sloping towards the river Gambhir which is about three miles distant. The hills in its immediate neighbourhood are almost destitute of wood while at some distance they are covered on their northern faces with large common pine trees, bushes and shrubs.

The neighbourhood considering all things and the oppression and treatment experienced by the inhabitants under the Gurkha rule is populous, and the surrounding flats and slopes are highly cultivated. The country is studded with numerous, though for the most part, small villages, few of them containing more than from 4 or 6, to 12 or 15 houses or families, and these have increased to an astonishing degree since it became a military post and subject to British jurisdiction.

The appearance of the country is pleasing to the eye of a stranger though differing widely from that of the interior. The climate of Subathu enjoys an agreeable temperature, the mean being from $65\frac{1}{2}^{\circ}$ to 66° though during May and June it is hot, but seldom or ever becomes what is called oppressive in a house. Taking it all in all it is very healthy throughout the year. Fever and rheumatism are the predominant complaints, but with respect to the former compared to the plain, cases are remarkably few, more particularly so during the periodical rains which commence between the 20th and end of June, and sudden changes or in damp weather; and the latter in the cold season. When the winter is rigorous, snow falls in January and February to about the depth of four inches, but seldom lies on the ground above two or three days, it being too low and exposed, and the sun's rays being too powerful.

Hoar frosts commence in November, and vanish about the beginning or middle of March; in severe seasons during part of December, January,

and the early part of February, standing water freezes to considerable thickness. The rainy season generally speaking is heavy and terminates sometimes about the middle or end of September, and at others not till the 10th or 20th of October. The surrounding country is much cultivated and agriculture carried on to a considerable extent and this is rapidly on the increase wherever the inhabitants from the adjacent states, who are often obliged to fly from the oppression and tyranny of their petty rulers, can obtain arable lands sufficient for the maintenance of themselves and families.

Declivities of ranges and mountains, unobstructed by rocks, which are cultivated, are cut and laid out with a considerable deal of labour into ledges or sloping fields of all dimensions, shapes and sizes, resembling the steps of a ladder placed in a slanting position, supported mostly by embankments of earth, and sometimes of stone. All flats or pieces of table land are cultivated, and those on the banks of rivers, and streams are chiefly planted with rice for the sake of water for irrigation. The rice crops are luxuriant and yield an abundant and profitable return to the farmer. The best rice is uncommonly cheap and reckoned superior to any of a similar kind produced in the plains near this quarter.

The productions about Subathu are various;—such as Indian corn, cotton,[a] opium in a small quantity, rice of several kinds, wheat, jow (barley,) koda or marwa,[b] various pulse, the several species of bathu,[c] úgal,[d] a small quantity, sounk,[e] kachálu or pinálu,[f] and gagtí or gandhialí,[f] kangní,[g] chenna,[h] bajra,[i] ginger, a great article of export trade, superior to that in the

a Somewhat different to that which is cultivated in the plains.

b Paspalum Scrobiculatum. c Amaranthus Anardhana, these grains do not attain that perfection low down which they arrive at in the interior. d Panicum Emarginatum. e A small grain not unsimilar to the chenna, (Panicum Miliaceum.) f Both esculent roots, the former being the Arum colocasia and the latter being or something resembling the Arum campanulatum or Dioscorea fasciculata or Dioscorea of Roxburgh. g Panicum italicum. h Panicum Miliaceum. i Holcus Spicatus, this grain is only produced in the lower parts of the state of Hindúr.

plains, and scarcely inferior in point of size and quality to that which is produced in China; two kinds of bhang or hemp in a limited quantity, tobacco, lahsan or garlick, haldí,[a] til,[b] sero or sarson,[c] chillies or red pepper, with a few others including some common vegetables, hardly necessary to notice and differing little from those cultivated in the plains of Hindustan. Besides, there are apricots,[d] peaches, walnuts[e] exported in great quantities, a few apples, wild pears, raspberries of two kinds, yellow and pale white, strawberries, small and insipid having no taste or flavour, phút,[f] a large and oblong kind of melon, barberries of a purple colour, large and plentiful; darús, a small species of pomegranate, which is gathered, split or broken in pieces, the fruit taken out, and the shells,[g] in a dry state exported to the plains in great quantities as an article of commerce, and kaephal,[h] with some other wild fruits.[i]

Kotgerh,[j] a small village and military outpost occupied by a detachment of the 1st Nasírí Battalion in Latitude 31° 19' and Longitude 77° 30' is situate on the left bank of the Setlej on the slope of a range which rises to the height of 10,656 feet above the level of the sea crowned by Wartu or Haltu fort now dismantled and in ruins, separating the dell

a Turmeric (Curcumalonga.) b The seed of the Sesamum from which oil is expressed. c A species of mustard (Sinapis dichotoma) of the seed of which oil is made; the leaves of this plant, when young, are eaten by the natives as a vegetable.

d Smaller, not so good, and less abundant than in the interior.

e The Kernel of which is often made into oil.

f Cucumis momordica of Roxburgh.

g Used for dying a yellow colour and when mixed with other ingredients produces a blue die.

h Amyris heptaphylla.

i The indigenous fruits, generally speaking, especially in the interior, are large and upon the whole pretty good and might be greatly improved by ingrafting.

j On the site of the present house occupied by the Officer commanding the post formerly stood the village of Danthat. The cantonment itself is about 150 yards off adjoining the small village of Liptari and the village of Kotgerh, a little above which was the residence of the Rana or chief, is about 100 or 150 yards beyond and below the sipahis huts.

of the Setlej from the Pabar, Jumna and Tons, and the other great river to the South East.

The cantonment of Kotgerh is 6634 feet above the sea and the difference of level between it and Subathu is 2,429 feet which answers to a mean decrement of temperature of nearly nine degrees.—The Setlej is distant about four miles in a straight line to the North West running below it about 4000 feet, a steep descent the whole way. The distance from the plains of Hindustan is about fifty miles, and the nearest point of the Himalaya 25.*

It enjoys a delightful climate throughout the year. The rains commence about the 20th or 25th of June and continue to the end of September, and sometimes to the middle of October. They occasionally terminate about the 15th or 20th of September and are more heavy and protracted than in the plains. This is followed by what may be called autumn, which lasts all October and for the greater part of November, according to the mildness of the season; after which winter with all its horrors sets in. The temperature of the rainy season is quite pleasant, often chilly, and when the sun breaks through the clouds rarely rises to 72° in the house, but this degree in a humid atmosphere, where evaporation is checked, feels sometimes close.

During the months of April, May, and June, that period of the year so scorching and oppressive in the plains of Hindustan, the climate is cool and agreeable in the shade, and within doors, a cloth coat rarely feels uncomfortable, but the sun is very hot, and although the mean temperature of the climate at Kotgerh does not exceed that of London by above five

* Mani-majra the nearest town in plain level, about one mile from the foot of the hills, is not less than 1200 feet above the sea.

or six degrees yet the heat of the sun's rays is very powerful. It is thickly wooded on three sides, amongst which is a variety of pines and oaks, rhododendrons and almost every tree, shrub and plant in the neighbourhood peculiar to, and natives of Europe, with many others unknown, amongst which are a variety of aromatic plants and shrubs.*

In December, January, and February, snow falls and lies in shaded places to the northward from one to three feet in depth. It sometimes falls as early as the middle and end of November, and also in the beginning of March but never lies on the ground. The winters here resemble those in Europe but are less severe. Frosts commence before the middle of October, but notwithstanding that the effect of elevation is equivalent to geographical latitude, yet owing to the much greater altitude of the sun's rays in the former, they have considerable power even in winter, and the snow in exposed situations melts away in a few days of sunshine although the air remains very sharp, and frosty nights prevail during the greater part of March. It is worthy of remark that the flakes of snow are extremely large, larger than ever I remember witnessing them in Europe.

Spring at Kotgerh and at similar elevations may be said to commence about the middle or latter end of March, but this greatly depends on the nature of the season, and to continue all April. May is often rude and disagreeable; if rainy, fires and woollen clothes are indispensable to comfort. The harvest or reaping season commences in May and terminates about the end of June. The jow or barley is the earliest, and the wheat or kanak, and úwa jow are fully a month later. In more elevated situations it is backward, and the wheat is often not housed till sometime

* There is a species of small reed bamboo which attains the height of eight or twelve feet growing all over the higher mountains. It is used for a variety of domestic purposes and if introduced into Britain might prove an advantageous acquisition to the peasantry as well as to gardeners and others.

after the rainy season has fairly set in, the consequence of which is that many of the crops never ripen, and the natives from necessity are obliged to reap them while partially in a green and immature state, (the ear being full,) for the sake of preserving the whole from injury and destruction.

The natives seem to be perfectly aware that snow contains properties which increase the value of the crops.

The following are the grains and other productions at Kotgerh and in its neighbourhood. Several kinds of rice chiefly of the coarser sort, jow, (barley,) úwa jow,[a] wheat (kanak,) phaphara or phaphar,[b] úgal,[c] chaberí or jaberí,[d] opium in great quantities for export trade,[e] three species of bathu,[f] black, red, and white, kachálu or pinálu, and gagti or gan-

[a] Hordeum cœleste. [b] Panicum Tartaricum. [c] Panicum Emarginatum. [d] The grain of this differs little in appearance from that of the phaphar and úgal. [e] From the seed of the poppy the natives express oil, which, being sweet and pleasant to the taste and an excellent substitute for ghee, (melted butter) is mixed with their food and eaten; the oil is also used for burning. The quality and inebriating properties of the hill opium are greater than that produced in the Sikh states below; it is consequently considered superior and is in great demand in the Punjab. It fetches an enhanced price at the different marts in the plains to which it is taken, and is produced at less expense and with less labour; that in the plains requires irrigation which is never applied to it in the interior of the hills, owing to the constant moist state of the soil. It may in some few places on the banks of the Setlej and other rivers where the heat is intense. The pernicious effects of this drug so much in repute amongst the native population in India are well known. The natives of these mountains, especially the females, on the most trifling occurrences apparently which thwart their views and inclinations not unfrequently commit suicide by swallowing a piece of this drug. It may not be out of place here to mention, since the cultivation of the poppy seems to begin to attract the attention of a few individuals in Britain, that the seed at the elevation of Kotgerh and even at greater heights is sown in October, and the young plant after arriving at the height of a few inches is buried in snow during the winter months. Previous to this, it is well weeded and cleaned, and, when the snow is all melted and winter terminated, it sprouts up rapidly and comes to perfection in April and May according to the nature of the season, when the natives are busily occupied in incising it with a small iron instrument called nehirna and collecting the milky substance which oozes out. If the incisions are made in the afternoon, the substance is frequently collected the following morning and sometimes not till the second day. The process appears to be very tedious and troublesome from the inefficiency of the instrument employed which differs somewhat from that in use in the plains, and seems less applicable to the purpose for which it is intended. [f] Amaranthus Anardhana; the leaves of these when very young and tender or about a few inches high are used as a vegetable by the inhabitants. At this height and even higher, in appearance, they exactly resemble the lal and green sag (culinary herbs) of Hindustan.

dhialí,[a] a small quantity of coarse tobacco, two kinds of bhang or hemp,[b] various pulse, a small quantity of cotton and ginger on the banks of the Setlej, and other rivers and streams, Indian corn in a very limited quantity, kangni,[c] chenna,[d] marwa or koda,[e] til,[f] serú or sarson.[g] The fruits are apricots,[h] peaches, cherries, small and very acid apples, pears, a few grapes, mulberries, filberts, walnuts,[i] bymí or bymbí a hardy species of apricot or peach (the stone of this fruit much resembles that of the common apricot which is abundant throughout the hills) with strawberries, large, and of an excellent flavor and taste, red, pale, yellow and several kinds of black raspberries, two or three kinds of barberries besides

a These edible roots are cultivated in great quantities all over the hills but are more general in the interior and constitute in no small proportion the winter food of the people; the leaves of them are also eaten as vegetables. b These plants grow most luxuriantly and attain a respectable height, but are chiefly cultivated in this part of the mountains for domestic purposes. The quality of the hemp is good and might easily, under proper management and care, by giving encouragement to the cultivators, be produced to any extent for export trade and is not unworthy of the notice and attention of private speculators. It is chiefly cultivated at and about all villages and also grows spontaneously in vast quantities. To come to great perfection, it seems to require a rich and well manured soil. To the South East in the mountainous parts of Gerhwal, Hemp is a staple article of commerce. The seed of these plants is partly expressed into oil, and partly, as well as almost all other grains and pulse, eaten by the inhabitants in a parched state. An intoxicating preparation called Chirras is extracted from the leaves of the bhang by means of rubbing them forcibly between their hands, to which the natives of all ranks and classes are much addicted. In appearance it is not unsimilar when extracted to old opium. It is exported in considerable quantities and used by mixing and smoking it with tobacco. The same attention might be applied to the extraction of the gum of turpentine and to the manufacture of pitch from the inexhaustible pine forests with which the mountains are covered. It is only in the vicinity of the lower hills that any regard is given to its extraction and is collected in a very small quantity, but, in the course of time, both these articles might prove of great value in a commercial point of view. There are other natural productions unnecessary here to notice, besides those enumerated above, to which speculators might apply some of their resources with advantage and profit to themselves. c Panicum italicum. d Panicum miliaceum. e Paspalum Srobiculatum. f In a small quantity only at this height. The oil expressed from the seed of the til is sweet and an excellent substitute for salled oil, the only objection to it is, its rather nauseous smell, but when used this is not perceptible. g Made into oil and the leaves when tender are also used by the natives as a vegetable. h The fruit is gathered when perfectly ripe; the stones broken and the kernels taken out and expressed into an excellent oil for burning. Although the kernels from their extreme degree of bitterness, one would suppose, are hardly palatable, yet I have frequently observed the natives prepare them in such a manner as to permit of their being eaten with their food. i Having thicker shells than those produced in the lower hills; many of these trees on elevated places attain a great size.

the common purple hazelnuts, black and red currants, horse chesnuts,* and other wild fruits, the indigenous productions of the country.†

Two species of oats in the interior of the hills grow spontaneously amongst the wheat and barley fields, and also on waste lands, but the grain is so small that the natives make no use of it, and they seem to be ignorant that it is excellent and nourishing food for cattle, goats, and sheep.

Two hardy species of rice are cultivated on elevated situations and both are subject to occasional falls of snow. They grow luxuriantly unassisted by irrigation. These I believe are yet unknown in botany and the introduction of them into Britain, and elsewhere into Europe might prove a valuable and important acquisition. They are both of the coarser sort.

Kotgerh is in the Pergunna of Sundhoch, one of the divisions of the independent petty state of Kotguru and was ceded to the British Government for a military post on the conquest of the hill provinces, or shortly

* These, together with chamús, a root found in the forests and waste lands in many elevated parts along the skirts of the Himalaya, and which are likewise the food of the beasts of the forest, the natives, from necessity in times of scarcity and famine are obliged to substitute for food. Both these have a very bitter taste, and to make them palatable, the natives prepare them in the following manner; they are first opened or cut into pieces, then steeped or soaked in water for sometime which deprives them of their bitterness: they are afterwards dried in the sun and pounded or ground into a flower, made into cakes and eaten in other ways. This circumstance alone sufficiently shews the precarious and miserable subsistence of the wild and uncouth race of people who inhabit the most elevated and savage parts on the hither side of the Himalaya. The fruit of the Bymi or Bymbi, whose natural climate is cold and elevated, and where it appears to thrive admirably well, when arrived at a proper state of maturity, is pulled, dried in the sun, and also eaten as food in much the same manner as horse chesnuts and chamús. It is like a prune, but retains its yellowish colour, is sweet and has not an unpleasant taste.

† A few common vegetables, such as cucumbers, a small kind of onion, radishes, and a few others are cultivated by the people. There are besides, several species of wild culinary herbs, in common use amongst the natives, to be found in the forests at different seasons of the year. At the height of 12,000 or 13,000 feet, for instance along the top of the Chashil range, a small species of wild onion or leek is very plentiful.

after the termination of the war with the state of Nepal in this quarter in 1815.

The natives of this part of the country are subject to the goitre or large swelling in the neck. The complaints most prevalent among them are fevers and rheumatism.

The aspect of the country in the neighbourhood differs materially from that of the lower mountains near the plains, the ranges are more regular and the mountains are lofty and abrupt. It is extremely steep on all sides. The villages are few and small in most places, and the population is scanty and scattered, but does not seem to be on the increase.* The quantity of waste land which is considerable, evidently appears to have been cultivated at an antecedent period, and indicates beyond a doubt that the country was better peopled formerly than it now is. Most of the villages are more or less in ruins, and some of the houses though still standing are deserted and remain unoccupied. This may be accounted for partly from the tyrannical measures resorted to by the Gurkha chiefs to keep the people under due subjection.

Immediately after the rains cease the Zemindars or farmers, whilst the soil is in a moist state, begin to plough, and commence sowing wheat, barley and úwa jow. These being the principal grains on which the inhabitants at this height are dependant, are buried in snow during the winter months. When much more falls at the elevation of Kotgerh the produce of these grains is very considerable; but when it does not, and the

* Population being stationary may be easily recounted for by the prevalence of female infanticide, of the revolting custom of Polyandry and the promiscuous intercourse of the sexes from the early age of eight or ten (female chastity being unknown) together with slavery, a traffic formerly in the plains of Hindustan to considerable extent more especially so from the lower hills. The former throughout the states subject to British authority, as far as we know is of rare occurrence and the latter is certainly less extensive than it was formerly. It is therefore to be hoped that population will begin to augment.

soil is not amply supplied with a sufficient quantity of rain during the latter part of February and early part of March, the crops are poor and not unfrequently are followed by great scarcity and sometimes though seldom by famine, when the natives are reduced to an extreme state of poverty and wretchedness. In places more elevated, the grain suffers considerable injury from too severe a winter, while lower down and on the banks of the river Setlej, the wheat and barley crops yield but a small return even in good seasons to the husbandmen. This however greatly depends on the quantity of rain which may fall during the season. The low lands and flats on the banks of rivers and streams are more adapted to the cultivation of coarse rice which thrives remarkably well and produces a plentiful return to the farmer.*

After the different grain crops on the high lands have attained the height of two or three inches the natives in the interior make a practice of spreading manure over them which they say is the means of materially increasing their value.

Bullocks are the only animals used in all stages of agriculture in these mountains on the hither side of the Himalaya and all grain is trodden by them in the same manner as in the plains of India with their mouths muzzled. The grain after being cut, is bound into small sheaves and allowed to lie, and dry in the sun for some time, after which it is stacked,† and subsequently spread into circular flats paved with stones and trodden out as above-mentioned.

The same sort of rude light plough in the plains of Hindustan is also used in the hills, and the other implements of husbandry are few, and of little value.

* Bamboos and some of the tropical fruits grow on the banks of the Setlej and the climates are very diversified according to the elevation above sea level.

† This is only applicable to rice on the banks of the Setlej, &c. after it has been cut down.

The fields where the mountains are abrupt and steep, are cut into inclined terraces of all sizes and descriptions supported by stone walls resembling the steps of stairs, one above the other. On the banks of the Setlej and other rivers, where the principal produce is rice, the fields are invariably partitioned into flats to allow of the water required for irrigation, to cover the whole surface.

The seasons of Kotgerh are reversed as regards the plains of Hindustan or nearly correspond with those in many parts of Europe: that is the harvest is fully a month or six weeks later than at Subathu, which is a month behind that in the plains of India. We begin to sow Europe vegetables in February and March, and plant potatoes in March, April, and May. The reaping season on the banks of the Setlej in the neighbourhood of Kotgerh, where the heat is extremely great and oppressive, is, if any thing earlier than that about Subathu, and in situations of the same height above the sea. The crops of wheat and barley are more exuberant and productive about Kotgerh than they are in the lower hills and úwa jow, which is little inferior in point of quality and substance to wheat, will not thrive at a less elevation at least the natives do not cultivate it.

The wheat, barley and úwa jow crops are succeeded by phaphara, úgal, chaberí or jaberí and the several kinds of bathu. These are cut down and taken in before winter commences.

I have purposely omitted giving the mean temperature of each month in the present journal as the observations are broken and irregular from the circumstance of being frequently obliged to move. But not pretending to great correctness, the mean temperature of the year at Subathu and Kotgerh deduced from subsequent registers will be found at the end of the abridgement or table.

It is necessary to state that the observations taken at Subathu (with few exceptions) are from the 17th of September, 1817, to the 17th June, 1818, inclusive, from that period to the 10th of November at Kotgerh and the subsequent ones partly at intermediate places, and partly at Kotgerh which duty obliged me to visit occasionally.

An abridged Table of Thermometrical Journal kept at Subathu and Kotgerh, &c. shewing the Highest, Lowest and Mean Temperature of each day in every month.

1817.	*September.*			*October.*			*November.*			*December.*		
Day.	*Highest.*	*Lowest.*	*Mean.*	*Highest.*	*Lowest.*	*Mean.*	*Highest.*	*Lowest.*	*Mean.*	*Highest.*	*Lowest.*	*Mean.*
1				71,7	66	68,8	79	64,7	71,8	57,2	55	56,1
2				72	66,5	69,2	75	57	66	58,2	55,3	56,7
3				70,5	65,6	68	80	62,5	71,2	59,5	56	57,7
4				70	64,6	67,3	79,5	60	69,7	60	57	58,5
5				70,6	65	67,8	78	61	69,5	61	54	57,5
6				72,5	66	69,2	77	56,5	66,7	62,7	54	58,3
7				71	65,8	68,4	88	57	72,5	62,7	55	58,8
8				70,5	64	67,2	86	57	71,5	64	53,8	58,9
9				70	64	67	91	59	75	60	52	56
10				72,5	65	68.7	84,5	61,5	73	61,2	52	56,6
11				72	65	68,5	87,5	62,5	75	59	51,2	55,1
12				71	65	68	73	60,5	66,7	58	52	55
13				90	89,5	89,7	76,6	57	66,8	59	53	56
14				77	66	71,5	64	62,6	63,3	55,4	51	53,2
15				74	62,5	68,2	63,7	60	61,8	51,4	47	49,2
16				70	68	69	62,5	60	61,2	54	45,2	49,6
17	72,2	70,3	71,2	71	61	66	62,3	59,5	60,9	55	46	50,5
18	75,3	69,2	72,2	70	62	66	62,3	59	60,6	56	47,3	51,6
19	77,2	71,2	74,2	69	63	66	62,5	59	60,7	65	44	54,5
20	73	69,5	71,2	69,5	64	66,7	61	58	59,5	59	37,4	48,2
21	71,3	69	70,1	70	63,5	66,7	60	56	58	60	37	48,5
22	71,5	66,6	69	70	63	66,5	58,3	56,7	57,5	60	41	50,5
23	69,7	65,8	67,7	70	64	67	58,5	56	57,2	50,6	45,2	47,9
24	71	65,6	68,3	69	63	66	58	54	56	58	38	48
25	71	69	70	82,5	65	73,7	57,5	55	56,2	55,5	47	51,2
26	72,5	68	70,2	89	66	77,5	59	55	57	50	51	50,5
27	73	70	71,5	94	70	82	57,5	55,7	56,6	56,6	49,5	53
28	75	71	73	89	71	80	57,5	54	55,7	57	49	53
29	73,2	70	71,6	92	76	84	57	53,7	55,3	58	50	54
30	72	67,5	69,7	88	69	78,5	58	55	56,5	56	50,3	53,1
31				84	62	73				54	48	51

1818.	January.			February.			March.			April.		
Day.	High.	Low.	Mean.	High.	Low.	Mean.	High.	Low.	Mean.	High.	Low.	Mean.
1	55	49,2	52,1	45	39,7	42,3	52	47,3	49,6	62	58	60
2	59,3	49,4	54,3	43	41	42	48,2	45,6	46,9	64,4	58	61,2
3	59	50	54,5	46,2	42	44,1	47,3	45	46,1	65,4	58	61,7
4	57	49	53	44,3	43	43,6	48	45	46,5	65	60	62,5
5	58	51	54,5	48	42,3	45,1	53	44	48,5	63	58	60,5
6	59	52	55,5	42,3	41,8	42	55	47,4	51,2	66	58	62
7	57,2	51	54,1	45	38	41,5	57	49,5	53,2	69	61,3	65,1
8	57,2	51	54,1	46	41	43,5	57,4	51	54,2	68	62,3	65,1
9	58	51	54,5	51	42,7	46,8	57	51	54	71	63	67
10	57,2	51	54,1	49	45	47	58,2	51,4	54,8	68	61	64,5
11	55,2	49	52,1	47,2	45,2	46,2	61,3	52	56,6	63	59,4	61,2
12	55,3	47,2	51,2	49,3	45	47,1	63	55	59	64	58	61
13	54	49	51,5	52	46,5	49,2	63	58	60,5	65,3	58,3	61,8
14	52	50	51	53	47	50	65	58,3	61,6	68	62	65
15	51,3	49	50,1	52,3	50	51,1	68	59,4	63,7	70	62	66
16	52	46	49	54	50,3	52,1	69	61	65	67,2	62	64,6
17	52	46,2	49,1	55,2	52	53,6	69,5	62	65,7	68,3	60	64,1
18	48,2	45	46,6	60,2	53	56,6	68	62,3	65,1	71	62,7	66,8
19	49,3	45,3	47,3	60	55	57,5	68	62	65	72	65,4	68,7
20	50	44	47	59,2	55,4	57,3	67	60	63,5	73	65,6	69,3
21	44	40	42	56,5	53,3	54,9	67,3	60	63,5	74	63,3	68,6
22	49	40	44,5	55,2	53	54,1	67	59,5	63,2	72	66	69
23	50	42	46	55,4	52	53,7	69	61	65	72	64	68
24	52	43	47,5	53,4	50,3	51,8	67	62,5	64,7	73,2	62,4	67,8
25	51	43,7	47,3	48	45	46,5	68	63	65,5	74,1	67	70,5
26	53,5	43,4	48,4	50	44	47	62	54	58	74,2	66,3	70,2
27	51	46	48,5	48	45,4	46,7	62	55	58,5	75	66,2	70,6
28	51	44,8	47,9	53	45,5	49,2	59,3	54	56,6	77	69	73
29	44,3	42,3	43,3				60	52	56	75	70	72,5
30	43	42	42,5				62	54	58	70	66	68
31	43	40,3	41,6				60,4	56	58,2			

1818.	May.			June.			1818.	May.			June.		
	High.	Low.	Mean.	High.	Low.	Mean.		High.	Low.	Mean.	High.	Low.	Mean.
1	71	64,2	67,6	86	78	82	17	85	82	83,5	80,2	77,5	78,8
2				88	80	84	18	85	82,5	83,7	86	70	78
3				89,2	83	86,1	19	88	78	83	68	63,4	65,7
4				80	75,4	77,7	20	87	85	86	69,2	61	65,1
5	78	71,2	74,6	82	75	78,5	21	87	68	77,5	80	59	69,5
6	75,2	70	72,6	81	72	76,5	22				64	57	60,5
7	72	68	70	84	77	80,5	23	85	71,5	78,2	75	73	74
8	71,2	67	69,1	86	78	82	24	82	72,5	77,2	73	70	71,5
9	67,5	64	65,7	84,2	81	82,6	25	90	82	86	71	70	70,5
10	72	70	71	83,4	78	80,7	26				70,3	70	70,1
11	74,3	73	73,6	79,2	74	76,6	27	83	79	81	72	69	70,5
12	74,3	73	73,6	79,3	70,4	74,8	28	84,2	77	80,6	70	68,4	69,2
13	77	72,1	74,5	81,2	74,3	77,7	29	86	79	82,5	77	64	70,5
14	82	76	79	83	75	79	30	85,4	76,3	80,8	76,4	67	71,7
15	84	79,4	81,7	77,3	74	75,6	31	85	78	81,5			
16	84,2	81	82,6	83	74	78,5							

1818.	July.						August.					
	Inside.			Outside.			Inside.			Outside.		
Day.	High.	Low.	Mean	High.	Low.	Mean.	High.	Low.	Mean.	High.	Low.	Mean.
1	75	67	71							70,3	66,2	68,2
2	72	66,3	69,1							71,5	64	67,7
3	73,2	64	68,6							72,2	66,3	69,2
4	77,2	65,4	71,3							72	65,4	68,7
5	79	66,4	72,7							74,5	65	69,7
6	74	66,3	70,1							74,1	66,8	70,4
7	76,2	67,2	71,7							72,3	67	69,6
8				74	65	69,5				72	64	68
9				78	66	72				75	65	70
10				74	67	70,5				74	65	69,5
11				70	64	67				75,2	63	69,1
12				70,2	63	66,6				74,2	65	69,6
13				54	52,3	53,1				75	66	70,5
14				57,2	51,4	54,3				77	67	72
15				57	51,3	54,1				77,2	65,4	71,3
16				57	51,2	54,1				78	66,4	72,2
17				71,3	66	68,6				77,3	67,5	72,4
18				73	62	67,5				76	65,4	70,7
19				74	64,2	69,1				71	64	67,5
20				77,2	65	71,1				68	61	64,5
21				74,3	65,4	69,8				71	61,4	66,2
22				67	63,3	65,1				74	63,4	68,7
23				68	62	65				73	62	67,5
24				74	63,6	68,8				74,2	62	68,1
25				74	64	69				74,2	64	69,1
26				75,4	67,4	71,4				69	62,2	65,6
27				77	67	72				69	62	65,5
28				73	65	69				72	60	66
29				73,2	64	68,6				72	62	67
30				74	64,2	69,1				69,5	63	66,2
31				74,4	66	70,2				70	61,5	65,7

1818.	September.								
	Barometer.			Thermometer Attached.			Thermometer Detached.		
	Inches. 100 parts.	Inches. 100 parts.	Inches. 100 parts.						
Day.	High.	Low.	Mean.	High.	Low.	Mean.	High.	Low.	Mean.
1							70	61,3	65,6
2							71	62	66,5
3							68,3	61	64,6
4							70	60	65
5							71,2	63,4	67,3
6							72,2	62	67,1
7							71	61	66
8							71	61	66
9							63	59,4	61,2
10							70	56	63
11							70,2	59	64,6
12							69,5	59,4	64,4
13							62	59	60,5

1818.	September.								
	Barometer.			Thermometer Attached.			Thermometer Detached.		
	Inches. 100 parts.	Inches. 100 parts.	Inches. 100 parts						
Day.	High.	Low.	Mean.	High.	Low.	Mean.	High.	Low.	Mean.
14							64	57	60,5
15	23,720	23,685	23,702	64	62,8	63,4	68	54,4	61,2
16	23,750	23,735	23,742	66	59	62,5	63,2	59,3	61,2
17							63,4	58	60,7
18							61,5	56,2	58,8
19	23,690	23,640	23,665	64,3	61	62,6	63	55,2	59,1
20	23,750	23,680	23,715	64,3	59,6	61,9	67	55	61
21	23,825	23,670	23,747	65,1	61,2	63,1	68	57,5	62,7
22	23,800	23,740	23,770	65,8	61,7	63,7	68	57,2	62,6
23	23,790	23,740	23,765	67,3	62,5	64,9	68,1	57	62,5
24	23,780	23,720	23,750	67,2	63,3	65,2	68,7	57,2	62,9
25	23,780	23,725	23,752	67,5	63	65,2	68,1	57	62,5
26	23,750	23,670	23,710	68	62,4	65,2	69	58	63,5
27	23,730	23,675	23,702	69,2	63,2	66,2	70,1	59,3	64,7
28	23,775	23,720	23,747	68,3	63,2	65,7	70,4	59	64,7
29	23,795	23,730	23,762	69	63	66	70,1	58,4	64,2
30	23,810	23,755	23,782	70	63,4	66,7	71	58,5	64,7
1818.	October.								
1	23,770	23,725	23,747	69,4	63,4	66,4	70	59,2	64,6
2	23,755	23,700	23,727	70	64	67	70	57,2	63,6
3	23,760	23,720	23,740	70,3	66	68,1	70,6	61,4	66
4				70,2	65,6	67,9	70	60	65
5				70	64,3	67,1	69,2	58	63,6
6				67,7	64,4	66	66,2	57,4	61,8
7				65,3	61,2	63,2	63,2	54	58,6
8				66	59,3	62,6	65,6	52,2	58,9
9				65,3	58,4	61,8	65,4	51,4	58,4
10				64,3	58	61,1	64,5	51	57,5
11				62,5	55,8	59,1	64,3	51,4	57,8
12				62	55,4	58,7	63,4	50	56,7
13				62,3	55,4	58,8	64,6	51	57,8
14				63	55,4	59,2	64,5	52	58,2
15				62,6	55,4	59	63,2	52,5	57,8
16				62	54,5	58,2	64,3	51,6	57,9
17				61,5	55,3	58,4	63,6	50	56,8
18				60,3	54	57,1	63,6	48,5	56
19				58,5	52,2	55,3	62	46,3	54,1
20				59,1	52,3	55,7	62,3	47	54,6
21				58,4	52,4	55,4	61	48,2	54,6
22				58	51,5	54,7	61	45,7	53,3
23				57,6	51,2	54,4	60,5	46,2	53,3
24				57,7	51,4	54,5	61,7	46,5	54,1
25				57,4	51,4	54,4	61,5	45,6	53,5
26				59,3	51,8	55,5	63,6	48	55,8
27				59,3	52,6	55,9	63,3	49,5	56,4
28				58,7	52	55,3	62,6	47,5	55
29				57	50,3	53,6	61,8	46,6	54,2
30				56	49,8	52,9	59,3	44,4	51,8
31				56	50,7	53,3	58,7	46	52,3

1818.	November.								
	Barometer.			Thermometer Attached.			Thermometer Detached.		
	Inches. 100 parts.	Inches. 100 parts.	Inches. 100 parts.						
Day.	High.	Low.	Mean.	High.	Low.	Mean.	High.	Low.	Mean.
1				55,7	50,1	52 9	58,4	45,6	52
2				54,4	51,4	52,9	58,2	48,5	53,3
3				53,8	50,6	52,2	53	47,4	50,2
4				53,5	47,6	50,5	54,7	43,4	49
5				53,6	48,6	51,1	55,7	45,6	50.6
6				54	48,5	51,2	57,6	47,7	52,6
7				53,8	48,7	51,2	58,4	43 8	51,1
8				61	59 3	60,1	55,8	46 7	51,2
9				59 2	51	55,1	56,2	47,4	51,8
10				77,4	70,4	73,9		56,7	
11				71,6	55,4	68,5		46.5	
12				76	48,5	62,2		46,7	
13				58	52 2	55,1		49,7	
14				78,4	46	62,2			
15				81	44,2	62 6			
16				81,5	43,4	62,4			
17				83,6	44	63,8			
18				85,4	43,2	64 3			
19				83 6	43,8	63,7			
20				81,7	43 5	62 6			
21				82,1	41,4	61,7			
22				81,8	45,3	63,5			
23				82,5				50,6	
24				88,5	55,5	72			
25				91,8	60,5	76,1	47,8	38	42,9
26				48	47,3	47,1	44,7	40,2	42,4
27	23,765	23,700	23,732	52	39,3	45,6	40	36,3	
28	23,750	23,720	23,735	52,5	47,3	49,9	39,6	38,4	
29	23,775	23,725	23,750	52,3	47,6	49,9	42,5	36,7	
30	23,810	23,750	23,780	53,3	47,6	50,4	41 5	38,6	
1818.	December.								
1	23,820	23,730	23,775	52,1	48	50	40,3	37,7	
2	23,815	23,790	23,802	52,3	46,5	49,4		37,5	
3	23,840	23,780	23,810	51,4	46	48,7	40,5	39	
4	23,805	23,755	23,780	51,6	46,5	49	43	37,5	
5	23,800	23,770	23,785	52,5	47,7	50,1	46,3	39,6	
6	23,780	23,720	23,750	51,8	47,9	49,8	48,6	44	
7	23,765	23,720	23,742	51	47,8	49 4	43,3	41	
8	23,740	23,680	23,710	51	46,6	48,8	41	37,5	
9	23,725	23,700	23 712	50,7	46,4	48,5	45	38	
10	23,785	23,745	23,765	49,4	47,5	48,4	42,3	38,2	
11	23,840	23,770	23,805	48,6	43,8	46,2	43,8	37,8	
12	23,790	23,710	23,750	49,4	44	46,7	38,7	38,6	
13	23,720	23,670	23,695	46,5	41,5	44	37,6	33,3	
14	23,725	23,685	23,705	46,5	42,7	44,6	39	35,4	
15	23,790	23,740	23,765	47,5	43,3	45,4	40,6	37,8	
16	23,860	23,810	23,835	49,6	45,3	47,4	43	39 8	
17	23,860	23,805	23,832	49,8	46	47,9	43,5	36	
18	23,840	23,780	23,810	50,1	45,2	47,6	43,9	40,5	
19	23,820	23,780	23,800	49,8	47,4	48,6	46,3	44,3	
20	23,840	23,800	23,820	51,6	48,3	49,9	50,2	45,4	

1818.	December.								
	Barometer.			Thermometer Attached.			Thermometer Detached.		
	Inches. 100 parts.	Inches. 100 parts.	Inches. 100 parts.						
Day.	High.	Low.	Mean.	High.	Low.	Mean	High.	Low.	Mean.
21	23,830	23,770	23,800	53,4	48,6	51	50,4	44,2	
22	23,780	23,730	23,755	54,5	49,8	52,1	45,9	45,5	
23	23,820	23,780	23,800	51,8	48,1	49,9	41,6	38,7	
24	23,865	23,840	23,852	50,5	47,7	49,1	46 3	37,9	
25							73,6	45	59,3
26							68 3	36,7	52,5
27							61,5	44,1	52,8
28							67,8	51,4	59,6
29							60,5	52,6	56,5
30							73	48,4	60,7
31							73	42,1	57,5

Note.—The Mean Temperature of the year at Subathu is 65°, and that at Kotgerh 55°.

List of Places in the foregoing Weather Journal shewing the height above Sea level with the Latitude and Longitude of each.

Names of Places.	North Latitude.	East Longitude.	Height above Sea level.
Subathu (Cantonment,)	30° 58′	76° 59′	4,205 feet.
Harripur Village,	31 1	76 59	3,147 ditto.
Mamleg Encampment,	31 3	77 2	4,499 ditto.
Jathea Debe or Janti Debe Temple,	31 4	77 6	4,971 ditto.
Gunai Village,	30 54	76 56	Unknown.
Penjore Valley (Town),	30 47	76 55	1,800 feet.
Mansa Debi (Temple),	30 44	76 51	abt. 1500 or 1,600
Khar, Town,	30 46	77 39	Unknown.
Bassi, between Khar and Kaniki Serai, (Town),	30 42	76 24	ditto.
Kaniki Serai Town,	30 41	76 13	ditto.
Douraki Serai Village,	30 48	76 1	ditto.
Ludianah Cantonment,	30 55	75 51	900 feet.
On the right of the Gambar river below Subathu,	30 58	76 59	3,105 ditto.
Khardu, Village,	30 55	77 2	Unknown.
Nakih, ditto,	30 52	77 5	6,000 feet.
Tikar, ditto,	30 48	77 7	5,400 ditto.
Bijana, ditto,	30 47	77 8	5,991 ditto.
Kahan, ditto,	30 41	77 13	Unknown.
Dheret, ditto,	30 38	77 16	ditto.
Chamcha, ditto,	30 35	77 17	ditto.
Nahn, Town,	30 33	77 18	3,180 feet.
Baniti Debee (Math),	30 37	77 16	5,092 do.
Serahan on the Nahn Road,	Unknown.	Unknown.	Unknown.
Bursgarhi Debi Temple,	30 45	77 9	6,195 feet.
Man Kagoan, Village,	30 55	77 2	4,400 ditto.
Simla Encampment,	31 6	77 11	7,886 ditto.
Pagu place of Encampment,	31 5	77 19	8,017 ditto.
Theog Fort,	31 7	77 23	8,018 ditto.
Kotgerh House,	31 19	77 30	6,634 ditto.
Wartu or Hattu Fort,	31 14	77 31	10,656 ditto.
Datnagar Village,	31 23	77 36	3,200 ditto.
Rampur Town,	31 27	77 38	3,398 ditto.
Kepu Village,	31 21	77 28	3,000 ditto.
Nirtnagar ditto,	31 22	77 33	3,087 ditto.

X.

Some Account of an Orang Outang of remarkable height found on the Island of Sumatra, together with a description of certain remains of this Animal, presented to the Asiatic Society by Capt. Cornfoot, and at present contained in its Museum.

By CLARKE ABEL, M.D. F.R.S. &c. &c.

And Member of the Asiatic Society of Calcutta.

IN the paper which I had the honor of reading to the Asiatic Society on the evening of the 5th of January last, I endeavoured to be as comprehensive as possible, in relation to the published histories of large manlike apes, and to the many speculations of philosophers respecting them; and in order the better to accomplish my purpose I divided my subject under the following heads. First, I gave an account of what particulars I had been able to collect of the circumstances which attended the capture of the Sumatra animal; Secondly, I gave the amplest description in my power, of its different remains as they were before the Society; Thirdly, I adduced a description of Wurmb's animal as described in the Batavian Transactions, for the purpose of shewing its identity with the Sumatra Orang Outang; Fourthly, I brought forward a description of the small Orang Outang of Borneo, for the purpose of shewing its relationship to the two

former animals, and for the better examining the opinion of the Baron Cuvier, that it is only the young one of Wurmb's and consequently of the Sumatra animal; and Lastly, I quoted some notices of very large manlike apes contained in the works of the older travellers, and attempted to determine to which of these the Sumatra Orang should be referred. The essay which I read to the Society was prepared in haste, and from imperfect materials, and although it might perhaps be suited to its principal object that of exciting enquiry, it was certainly unfit for publication. For this reason, and because those who are likely to be chiefly interested in this communication will be better satisfied with facts than opinions, I shall at present limit myself to an account of those particulars of the appearance of the animal when alive which are best authenticated, and of the circumstances that attended his capture as they have been collected from the persons who took him, and conclude with a description of such parts of his body as are preserved in the museum of the Asiatic Society.

Capture of the Animal.

The following short history of the circumstances under which the animal was found, and of the mode of taking him is drawn up from accounts which were furnished to me either directly or indirectly by persons concerned in his capture. A boat party under the command of Messrs. Craygyman and Fish, officers of the brig Mary Anne Sophia having landed to procure water at a place called Ramboom near Touraman on the N. W. coast of Sumatra, on a spot where there was much cultivated ground and but few trees, discovered on one of these a gigantic animal of the monkey tribe. On the approach of the party he came to the ground, and when pursued sought refuge in another tree at some distance, exhibiting as he moved, the appearance of a tall manlike figure covered with shining brown hair, walking erect with a waddling gait, but sometimes accelerating his motion with his hands, and occasionally impelling himself forward with the bough of a tree. His motion on the ground was plainly not his natural mode of progression, for even when assisted by his hands or a stick it was slow and vacillating: it

was necessary to see him amongst trees in order to estimate his agility and strength. On being driven to a small clump he gained by one spring a very lofty branch, and bounded from one branch to another with the ease and alacrity of a common monkey. Had the country been covered with wood, it would have been almost impossible to prevent his escape, as his mode of travelling from one tree to another is described to be as rapid as the progress of a swift horse. Even amidst the few trees that were on the spot, his movements were so quick that it was very difficult to obtain a settled aim, and it was only by cutting down one tree after another, that his pursuers by confining him within a very limited range, were enabled to destroy him by several successive shots, some of which penetrated his body and wounded his viscera. Having received five balls, his exertions relaxed, and reclining exhausted on one of the branches of a tree, he vomited a considerable quantity of blood. The ammunition of the hunters being by this time expended, they were obliged to fell the tree in order to obtain him, and did this in full confidence that his power was so far gone, that they could secure him without trouble, but were astonished as the tree was falling to see him effect his retreat to another with apparently undiminished vigour. In fact, they were obliged to cut down all the trees before they could drive him to combat his enemies on the ground, against whom he still exhibited surprising strength and agility, although he was at length overpowered by numbers, and destroyed by the thrusts of spears and the blows of stones and other missiles. When nearly in a dying state, he seized a spear made of a supple wood which would have withstood the strength of the stoutest man, and shivered it in pieces; in the words of the narrator, he broke it as if it had been a carrot. It is stated by those who aided in his death, that the human like expression of his countenance, and piteous manner of placing his hands over his wounds, distressed their feelings and almost made them question the nature of the act they were committing. When dead both Natives and Europeans contemplated his figure with amazement. His stature at the lowest computation was upwards of six feet, at the highest it was nearly eight, but

it will afterwards be seen that it was probably about seven. In the following description, which I give in the words of my informant many of my readers will detect some of those external conformations which distinguish the young eastern Orang Outangs that have been seen in Europe. The only part of the description in which the imagination seems to have injured the fidelity of the portrait, regards the prominence of the nose and size of the eyes, neither of which are verified by the integuments of the animal's head which are represented in Plate I. "The animal was nearly eight feet high and had a well proportioned body, with a fine broad expanded chest and narrow waist. His head also was in due proportion to his body; the eyes were large, the nose prominent and the mouth much more capacious than the mouth of man. His chin was fringed from the extremity of one ear to the other, with a beard that curled neatly on each side, and formed altogether an ornamental rather than a frightful appendage to his visage. His arms were very long even in proportion to his height, and in relation to the arms of men; but his legs were in some respects much shorter. His organs of generation were not very conspicuous, and seemed to be small in proportion to his size. The hair of his coat was smooth and glossy when he was first killed, and his teeth and appearance altogether indicated that he was young and in the full possession of his physical powers. Upon the whole," adds his Biographer, "he was a wonderful beast to behold, and there was more in him to excite amazement than fear."

That this animal shewed great tenacity of life is evident from his surviving so many dreadful wounds, and his peculiarity in this respect seems to have been a subject of intense surprise to all his assailants. In reference to this point it may be proper to remark, that after he had been carried on board ship and was hauled up for the purpose of being skinned, the first stroke of the knife on the skin of the arm produced an instantaneous vibration of its muscles, followed by a convulsive contraction of the whole member. A like quivering of the muscles occurred when the knife was applied to the skin of the back, and so impressed Capt. Cornfoot with a persuasion that the animal

retained his sensibility, that he ordered the process of skinning to stop till the head had been removed.

It seems probable that this animal had travelled from some distance, to the place where he was found, as his legs were covered with mud up to the knees, and he was considered as great a prodigy by the natives as by the Europeans. They had never before met with an animal like him, although they lived within two days journey of one of the vast and almost impenetrable forests of Sumatra. They seemed to think that his appearance accounted for many strange noises, resembling screams and shouts, and various sounds, which they could neither attribute to the roar of the tyger, nor to the voice of any other beast with which they were familiar. What capability the great Orang Outang may possess of uttering such sounds does not appear, but this belief of the Malays may lead to the capture of other individuals of his species, and to the discovery of more interesting particulars of his conformation and habits.

The only material discrepancy which I can detect in the different accounts which have been given of this animal, regards his height which in some of them is vaguely stated at from above six feet to nearly eight. Capt. Cornfoot however, who favored me with a verbal description of the animal when brought on board his ship, stated that "he was a full head taller than any man on board, measuring seven feet in what might be called his ordinary standing posture, and eight feet when suspended for the purpose of being skinned."

The following measurements which I have carefully made of different parts of the animal in the Society's museum, go far to determine this point and are entirely in favor of Capt. Cornfoot's accuracy. The skin of the body of the animal dried and shrivelled as it is, measures in a straight line from the top of the shoulder to the part where the ancle has been removed 5 feet 10 inches, the *perpendicular* length of the neck as it is in the prepara-

tion $3\frac{1}{2}$ inches, the length of the head from the top of the forehead to the end of the chin 9 inches, and the length of the skin still attached to the foot from its line of separation from the leg 8 inches: we thus obtain 7 feet $6\frac{1}{2}$ inches as the approximate height of the animal. The natural bending posture of the ape tribe would obviously diminish the height of the standing posture in the living animal, and probably reduce it to Capt. Cornfoot's measurement of 7 feet, whilst the stretching that would take place when the animal was extended for dissection might as obviously increase his length to eight feet.

Description of the Remains of the Animal.

HEAD.*—See Plate I.

The face of this animal with the exception of the beard is nearly bare, a few straggling short downy hairs being alone scattered over it and is of a dark lead color. The eyes are small in relation to those of man, and are about an inch apart: the eyelids are well fringed with lashes. The ears are one inch and a half in length, and barely an inch in breadth, are closely applied to the head, and resemble those of man with the exception of wanting the lower lobe. The nose is scarcely raised above the level of the face, and is chiefly distinguished by two nostrils three-fourths of an inch in breadth, placed obliquely side by side. The mouth projects considerably in a mammillary form and its opening is very large: when closed the lips appear narrow, but are in reality half an inch in thickness. The hair of the head is of a reddish brown, grows from behind forwards and is five inches in length. The beard is handsome and appears to have been curly in the animal's life time and approaches to a chesnut color; it is about three inches long, springing very gracefully from the upper lip near the angles of the mouth in the form of mustachios, whence descending it mixes with that of the chin, the whole having at present a very wavy aspect. The face of the animal is much wrinkled.

* All the Plates are on a scale of six inches to a foot, except when otherwise expressed.

Hands.—Pl. II. The palms of the hands are very long, are quite naked from the wrists and are of the color of the face. Their backs, to the last joint of the fingers, are covered with hair, which inclines a little backwards towards the wrists and then turns directly upwards. All the fingers have nails, which are strong, convex, and of a black color; the thumb reaches to the first joint of the fore-finger.

Feet.—Pl. III. The feet are covered on the back with long brown hair to the last joint of the toes; the great toe is set on nearly at right angles to the foot, and is relatively very short. The original color of the palms of the hands and soles of the feet is somewhat uncertain, in consequence of the effect of the spirit in which they have been preserved.

Skin. The skin itself is of a dark leaden color. The hair is of a brownish red, but when observed at some distance, has a dull, and in some places, an almost black appearance; but in a strong light it is of a light red. It is in all parts very long; on the fore arm it is directed upwards; on the upper arm its general direction is downwards, but from its length it hangs shaggy below the arm; from the shoulders it hangs in large and long massy tufts, which in continuation with the long hair on the back seem to form one long mass to the very centre of the body. About the flanks the hair is equally long and in the living animal must have descended below the thighs and nates. On the limits however of the lateral termination of the skin which must have covered the chest and belly, it is scanty, and gives the impression that these parts must have been comparatively bare. Round the upper part of the back it is also much thinner than elsewhere, and small tufts at the junction of the skin with the neck, are curled abruptly upwards, corresponding with the direction of the hair at the back of the head.

In the dimensions which I am about to give of the skin, I have stated that it measures from one extremity of the arm to another five feet eight inches, to this is to be added fifteen inches on each side for the hands and

wrists, which will render the whole span of the animal equal to eight feet two inches.

The following are the measurements which I have made of the different parts.

Face.	*Inch.*
Length of the forehead from the commencement of the hair to a point between the eyes,	$4\frac{1}{2}$
From between the eyes to the end of the nose,	$1\frac{1}{2}$
From the end of the nose to the mouth,	3
From the mouth to the setting on of the neck,	$4\frac{1}{2}$
Circumference of the mouth,	6

Skin.	*Ft.*	*In.*
Greatest breadth about the centre of the skin,	3	2
Greatest length down the centre of the back,	3	2
Length from the extremity of one arm where it is separated from the wrist to the other,	5	8
Breadth of the skin from the situation of the os coccygis to the setting on of the thigh,	1	4
Across the middle of the thigh,	1	0
Greatest length of the hair on the shoulders and back,	0	10

MEASUREMENT OF HANDS AND FEET.

Front measurement of hand.

	Ft.	*In.*
Length of hand from the end of the middle finger to the wrist in a right line,	1	0
Circumference of hand over the knuckles,	0	11
Length of palm from the wrist,	0	$6\frac{1}{2}$
Length of middle finger,	0	$5\frac{1}{4}$

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NATURAL HISTORY

	Ft.	In.
Length of fore finger,	0	$4\frac{3}{4}$
——— of little finger,	0	$4\frac{1}{4}$
——— of ring finger,	0	5
——— of thumb,	0	$2\frac{1}{2}$

Back measurement of hand.

Length of ring finger,	0	$6\frac{3}{4}$
——— of middle finger,	0	$6\frac{3}{4}$
——— of little finger,	0	$5\frac{3}{4}$
——— of fore finger,	0	6
——— of thumb,	0	4

Front measurement of the feet. Plate III.

Length from the end of the heel to the end of the middle toe,	1	2
——— of sole of the foot,	0	$9\frac{3}{4}$
——— of middle toe,	0	$4\frac{1}{4}$
——— of ring toe,	0	$4\frac{1}{4}$
——— of little toe,	0	$3\frac{1}{2}$
——— of fore toe,	0	$3\frac{3}{4}$
——— of great toe,	0	$2\frac{3}{4}$
Circumference over the knuckles of the toes,	0	$9\frac{3}{4}$

Back measurement.

Length of middle toe,	0	6
——— of fore toe,	0	$5\frac{1}{2}$
——— of ring toe,	0	6
——— of little toe,	0	5
——— of great toe,	0	$4\frac{1}{2}$

*Measurement of the lower jaw.**

Circumference of the jaw round the chin,	0	$11\frac{1}{2}$

* The plate of the lower jaw is of the natural size.

	Inch.
Length of the ramus from the head of the jaw to its base, ...	4
Breadth of the ramus or ascending portion of the jaw at a level with the teeth, ...	$2\frac{1}{3}$
Depth of the jaw at the symphysis menti, ...	$2\frac{1}{2}$

MEASUREMENT OF THE TEETH.

Number of Teeth 32, namely 2 Canine, 10 Grinders, and 4 Incisive Teeth in each jaw.

Canine Teeth.

Whole length of lower canine teeth, ...	2.7
Greatest length of fang, ...	2
Smallest ditto, ...	1.6
Greatest length of the enamel or exposed part of the teeth, ...	1.1
Part exceeding the other teeth in length, ...	.4
Lateral breadth measured on a level with the jaw, ...	.6
Breadth from before inwards, ...	.7

Incisive Teeth.

Whole length of the lateral, ...	1.5
Of enamel exposed, ...	.7
Breadth of cutting surface, ...	.4
Ditto of central teeth, ...	.4

The front teeth of the upper jaw greatly resemble those of the lower, with the exception of the middle incisive teeth, which are twice the width of the lateral ones.

Fig 1.

Fig 2

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HISTORY.

Fig. 1.

Fig. 2.

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MUSEUM

B.

PL. 1
E.

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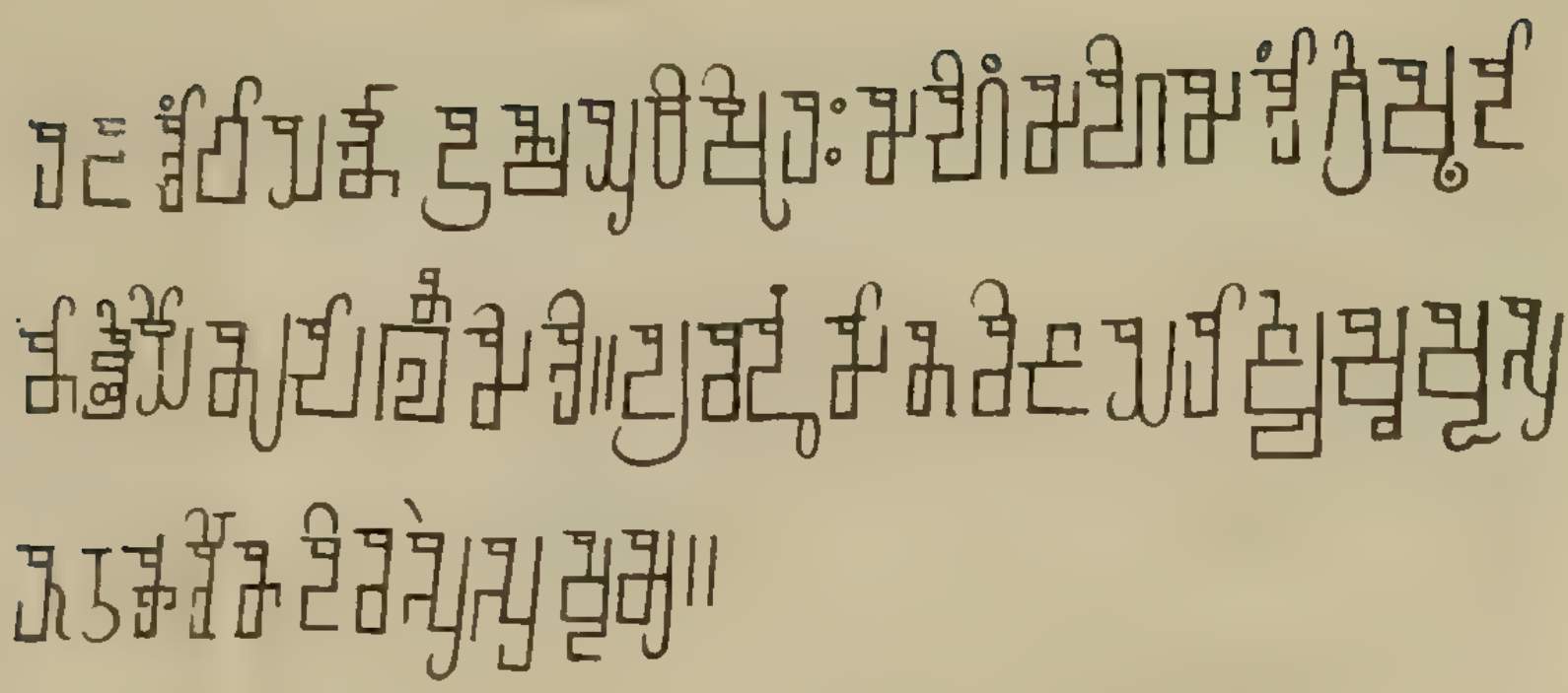

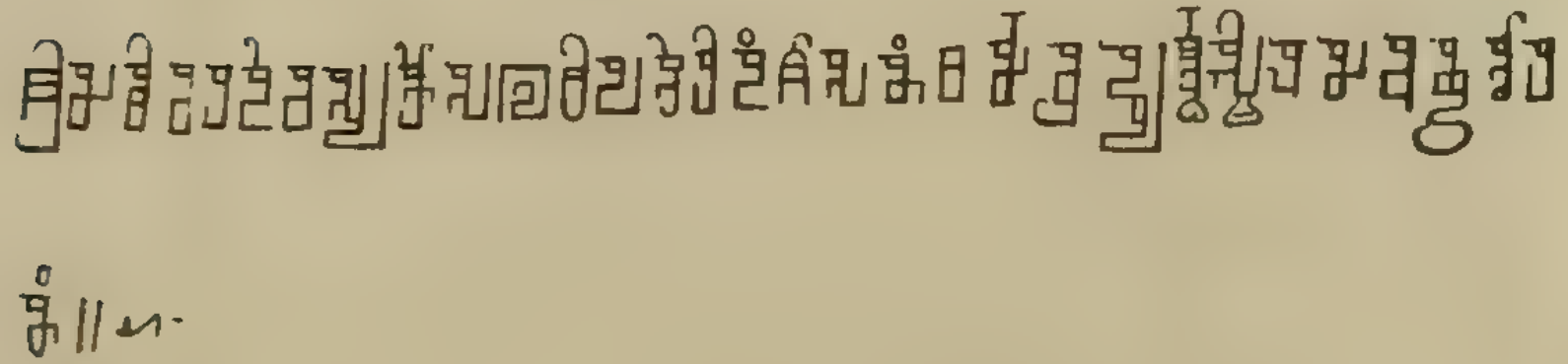

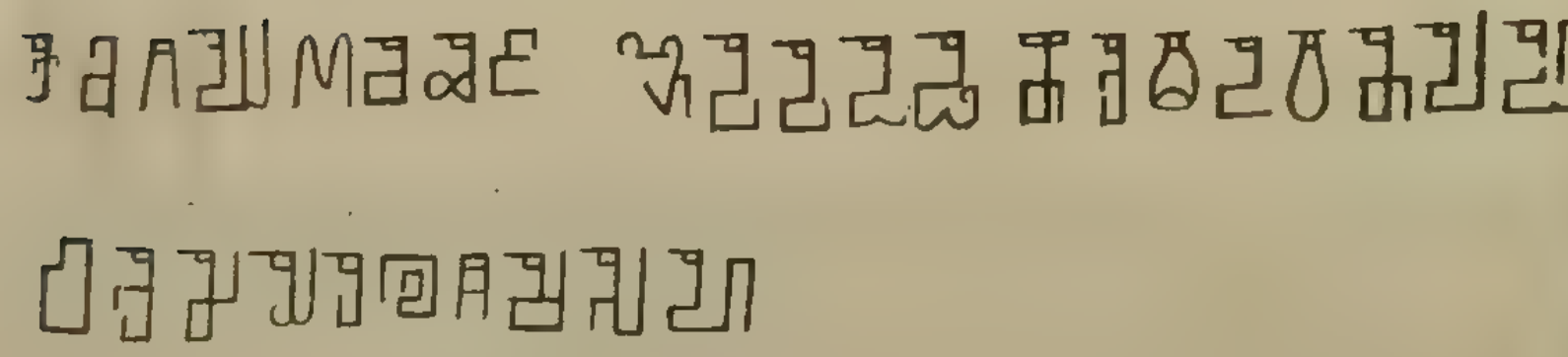

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Transcript in Deva-Nagari Characters of the Inscription on Copper Plates preserved in the temple of Raju Lochan.

पद्मगरुडशंखचक्रांकितमुद्राऽक्षराणि* ॥ श्रीमत्तोवरदेवस्य कोसलाधिपतेरिदं शासनं धर्मवृद्ध्यर्थं स्थिरमाचंद्रतारकं† ॥ जयति जगत्त्रयतिलकक्षितिभृत्कुलभवनमौलरत्नं श्रीमतोवरदेवो धौरेयसकलगुणकर्त्ता स्वस्ति श्रीपुरास्समधिगतपंचमहाशब्दानेकनतनृपकिरीटकोटिघृष्टचरणनखदर्पणोद्भासितोपकंठ दुर्मुखप्रकटरिपुराजलक्ष्मीकेशपाशाकर्षण दुर्ललितपाणिपल्लवनिशितनिस्त्रिंशघनघातपातितारिदिरदकुम्भमण्डलगलद्रक्तजलशोणितसदासिक्तमुक्ताफलप्रकरमण्डित रणागोणविविधरत्नसंभारलाभलोभविजृंभमाणारिक्षारवारिवाडवानलस्त्रंगोदय इवाकृतकरोद्वेगः क्षीरोद इवाब्धिभूतानेकातिशयरत्नसम्यगरुत्मानिव भुजगोद्धारचतुरपरामृष्ट शत्रुकलत्रनेत्रांजनकोमलकपोलकुंकुमपत्रभंगोत्प्रिष्टाचारव्यवस्थापरिपालनैकदत्तचित्तस्वपि च प्राक्तने तपसि यशसि रहसि चेतसि चक्षुषि वपुषि च पूजितो जनेनाकृष्टतया नितान्तमविकृतो गूढगाढस्वच्छप्रसन्नयदानेनचालक्षौतस्वामिभवनस्य बहुलयनेनार्जितकुतूहलोपि नितांतत्यागी रिपुजनप्रचण्डोपि सौम्यदर्शनो भूतिविभूषणोप्यरूपस्वभाव किंचासंतुष्टो धर्मार्जनेन सम्यल्लाभे स्वल्पक्रोधेन प्रभावे लुब्धो यशसि न परिवेत्ता परिहासकः स्वभासितासु न कामिनीक्रीडासु प्रतापानलदविशेष रिपुकुलतूलराशिस्तुहिनशिलाशैलधवलयशोराशिप्रकाशितदिगंतकांतप्रकृत्या श्रीमदिंद्रबलसूनोरलंकृतपाण्डुवंशस्य श्रीनन्नदेवस्य तनयप्राप्तः स्वपुण्यसंभारप्रशमिताशेषजगदुपद्रवः स्वप्रज्ञासूत्रीसमुद्धृताखिलकण्टकः परमवैष्णवो मातापितृपदानुध्यातः श्रीमहाशिवतिवरराजः कुशली। पेंटामभुक्तियपिंपरिपदके। ब्राह्मणं पूज्य प्रतिवाशिकः समाज्ञापयति विदितमस्तु भवतां यथास्माभिरयं ग्रामो यावच्चंद्रशशिताराकिरणप्रतिहतघोरांधकारं जगदवति प्रतितावदुपभोग्य सनिधिसोपनिधिरचाद भट्टप्रवेशदारद्रव्यक सर्वकरादानसमेतो पित्रोरात्मनश्च पुण्याभिवृद्धये भारद्वाजगोत्रवाजिशनेयमाध्यंदिनभट्टगौरोदत्तपुत्रभट्टभवदत्तभट्टहरदत्तेभ्यो ज्येष्ठदाक्षायणकपूर्वं प्रतिपादितः इत्यवगम्यभवद्भिर्यथोचितमस्मै भोगभागमुपनयद्भिः सुखं प्रतिवास्तव्यमिति भाविनश्च भूमिपालानुद्दिश्येदमभिधीयते। भूमिप्रदाः दिवि ललंति पतंति हंतहत्वा महीं नृपतयो नरके नृशंसाः एतद्वयं परिकलय्य चलां चलश्रीमायुस्तथा कुरुत यद्भवतामभीष्टं। अपिच रक्षा पालनयोस्तावत्फलं सुगति दुर्गति कोनाम स्वर्गमुद्दिश्य नरकं प्रतिपद्यते। व्यासगीत शास्त्रश्लोकमुदाहरंति सुक्षेत्रे रत्नं प्रथमं सुवर्णं भूवैष्णवी सूर्यसुताश्च गावः दत्ता त्रयस्ते न भवंति लोके यः कांचनं गांच महीं च दद्यात् षष्टिर्वर्षसहस्राणि स्वर्गे मोदंति भूमिदः सुलेप्ता चानुमंता च तान्येव नरके वसेत् बहुभिर्वसुधा दत्ता राजभिस्सगरादिभिः यस्य यस्य यदा भूमिस्तस्य तस्य तदा फलं स्वदत्तां परदत्तां वा यत्नाद्रक्ष युधिष्ठिर महीं महीमतां श्रेष्ठ दानाच्छ्रेयोनुपालनमितिप्रवर्द्धमानविजयराज्ये समस्यं भूरुहकार्त्तिकदिवसुसुकुसु।

* The inscription on the Seal is not in the fac-simile.

† This sentence occurs the last but one in the fac-simile page F, and that which there follows is merely a list of the consonants inserted by the decypherer.

XI.

Account of Ancient Hindu Remains in Chattísgher.

By R. JENKINS, Esq.

With Translations and Observations by H. H. WILSON, Esq. Sec. A. Soc.

EXTRACTS FROM A LETTER

FROM R. JENKINS, Esq. TO W. B. BAYLEY, Esq. Vice Pres. A. Soc.

"I HAVE requested Colonel Agnew to send you by dawk banghy, a small box containing three Copper Plates united by a ring of the same metal with a seal embossed. The plates and signet bear inscriptions in a character which none of the brahmins of the country are able to decypher, and which seems quite distinct from that of any other inscriptions which have been hitherto found in Chattísgher. You will probably think them worthy of being submitted to the Asiatic Society. I do not say *presented*, as the Pujáris of the temple to which they belong are not willing to part with them altogether, and I have promised that they shall be restored.

"The only account of these plates which I have been able to procure is that about forty years ago Bimbají Bhosla who then ruled in Chattísgher, gave the Pergunnah of Raju into the civil charge of a Marhatta chief named Hanwant Rao Maharik; that this person coming to reside in the town

of Raju, began to build a house there, and that some workmen, employed to dig for stones to aid the building came upon one at the depth of five or six feet, beneath which these plates were discovered. As the spot was contiguous to the principal temple of Rámchander generally known by the name of Raju Lochan, Maharik thought that the plates might be a record belonging to it, and accordingly deposited them in the temple where they have since been preserved.

Raju is a town situated on the right bank of the Mahánadí at the junction of the Pyri with that river, about twenty-seven miles to the south of Rypur. At the present day it is celebrated for the temple of Raju Lochan, which I believe means lotus-eyed, and for an annual jatra and fair of fifteen days held in honor of that deity, commencing on the Magh Shud Púrnima and ending on the Magh Badh Choudamí. A large concourse of people are said formerly to have attended it from all the neighbouring countries, for the purposes of devotion and traffic, and the assemblage is still considerable.

The temple of Raju Lochan would scarcely seem to merit a particular description, even if I were qualified to give it. The image of Rámchander is perhaps four feet high, of black stone, and faces the west in a standing posture. It has four arms holding the four common emblems of the Shankh, Chakr, Gada and Padma.

Garura as usual faces the god in a posture of devotion and behind him on a separate terrace are images of Hanuman, and Jagatpál, the Raja who is said to have built the temple. The latter is in a sitting posture. Between these two figures is a door way beautifully sculptured, with the representation of Nagas entwined together in endless folds. This door way leads to two modern temples of Mahadeo, and a third behind them is attributed to the wife of an oil seller, respecting whom there is a popular story as connected with the ancient image of Raju Lochan which makes her contemporary with Jagatpál.

I have mentioned these temples merely as being connected in one general enclosure with the principal one, in the immediate court of which at the four corners are besides four smaller temples, or rather shrines, containing the images of Narsinh, Váman, Varáha, and Badarináth. There has been recently attached a temple of Jagannáth.

There are two ancient inscriptions, on the walls of the temple of Rámchander. I enclose copies of them, Nos. 1 and 3. The principal one is I believe perfect and has been copied with some care; the other is much defaced. Fac similes would probably have been better than copies but I have not been able to take them.*

The Pujáris of the temple are called Pandehs, and state themselves to be Rajputs of the Byse tribe. Although they say that the worship of the temple was confided to their ancestors by Jagatpál who, according to one copy of the inscription built or consecrated it in 796 Samvat, or 1084 years ago, they are not able to carry up their pedigree beyond ten or twelve generations. They are altogether very ignorant.

The village of Shálmali is mentioned in the inscription as having been assigned by Jagatpál for the support of the temple. The Pandehs say that there was formerly a village of that name not far from Raju which was appropriated to the temple, but that the village has been since deserted, and in lieu of it a village called Rohna, erected not far from the ancient site of the former, was subsequently granted, and is still held by them. They also say that with three other villages, they had formerly other dues in the Rypur and Drúg Pergannahs, which since the death of Bimbaji have been resumed. At present they enjoy the revenues of four villages of trifling value, and a cash payment from the government of 353 rupees. In addition to this, the jatra produces a small sum annually, the residue

* Fac similes have been since received: see observations.

of which, after providing for the expenses of the temple and a small portion for the Purániks and Nagarchis, is divided amongst the ten families into which they have branched.

The ordinary annual ceremonies performed at the temple of Raju Lochan, are according to the Pujáris, the Utsava of the Râmnavami which continues nine successive days in Chyte; the Rat'hotsava, on Akhar Shúdh Dúj; (this is performed by the byragis;) the Janam Ashtami in Bhadon; the Parwa on the day of the Dewali in Kartik; and the Phúl Dal in Phagun.

On a small rocky island, at the junction of the Pyri and Mahánadi, is a temple of Mahadeo called Kuleswar, said to have been built by the Ráni of Jagatpál, and there has been an inscription on the wall of it, though it is now entirely illegible. It is taken care of at present by a few gosains, but as far as I can learn, is not much frequented.

The following notices of Raju, obtained from the Puránik of the temple of Ramchander, a Canoj brahmin, I mention on his authority, which I suspect is not good, and they are very trifling at best.

It is usual for the Purániks of the temples to be provided with accounts of the sacred places taken or pretended to be taken, from the sacred books. The Puránik of Raju, has no Kshetra Máhátmya or sacred history of Raju, but he believes it is to be found at Benares.

His father, he says, brought from Mandilla, the second Adhyaya of the Kapila Samvitta Pustak, a portion of one of the Upapurans. It contains the Chitrotpala Máhátmya, related by Bharadwaj Rishi to his fellow Rishis, in which it is written that in the Awundh Des, the river which runs from Utpaleswar, after its junction with the Pretoddharini, is called Chitrotpala. Utpaleswar is the present Kuleswar, and the Chitrotpala and

Pretoddharini are the Mahánadi and Pyri rivers. Raju, the Puránik adds, is known to this day, amongst the brahmins of Orissa, by the name of Kamal Kshetra, and amongst those of Benares, by the name of Padmapur. The three appellations, of Kamal Kshetra, Padmapur and Raju Lochan, have reference to the lotus, and the first is said to have been given by Brahma Deo.

In the Bhavishyottara Puran, translated into Hindi by Jurawan Sukul, an inhabitant of Nowagher in Chattísgher, the same Máhátmya is related to Dharmraj who with his brother visited Raju, by Markandeya Rishi, and another was communicated to Brahma Deo by Srung Rishi as follows:

"At the period of the celebrated Aswamedh, a Raja named Raju Lochan reigned at Raju. The horse Shamkarn having arrived there, the Raja seized him, and gave him to a celebrated Rishi named Kardama who resided on the banks of the Mahánadi. Satrughna who followed the horse with his army, attempting to take him from the Rishi was reduced with his army to ashes by the effects of the holy man's curse. Ramchander, on hearing the fate of Satrughna, marched in person to avenge his fate. The Raja met him, and obtained favor in his sight. Ramchander told the Raja that there were of old two deities at Raju, Utpaleswar Mahadeo, and Nilkantheswar; that Seo and Krishna were one; and that he himself would henceforth take up his abode there in the worship of Seo. Ramchander accordingly ordered the Raja to set up an image in his name, and to call it Raju Lochan, and added that its fame would be great, and that an annual feast should be held in his honor, on the Makar Sankránt in Magh. After paying his respects to Kardama Rishi, recovering his horse, and restoring Satrughna and the army to life, Ramchander returned to Ayodhya."

The image set up on this occasion is supposed to have been lost, and after the lapse of ages, to have been recovered, through supernatural means,

from a woman of the *teli* caste, who had degraded it to the purpose of giving weight to an oil mill. The discovery was made in a dream to Jagatpál and the image is that now existing at Raju, as re-established by that Raja.

Who this Raja was, what extent of country he governed, and in what relation he stood to the Hayhayabansi Rajas of Ratenpur, the present inscription seems to furnish the only means of deciding.

"The Ratenpur family are generally believed to have reigned for many generations over all Chattísgher and some of the neighbouring districts. There is a Sanscrit inscription at Ratenpur, dated 915 Samvat, which contains a list of nine Rajas, in the order of succession from father to son, including the one by whose order the inscription was engraved. If the Shastri's version of the Raju inscription is correct, Jagatpál conquered a Raja of Chattísgher named Prithi Deo. In the Ratenpur inscription, Prithi Deo is mentioned, as the great grandfather of the Raja in whose reign it was engraved. The father of Prithi Deo named Rudra Deo is represented to have built a temple and planted trees at Raju, and Prithi Deo, to have been a fortunate prince and in his old age to have resigned his kingdom, called Kosala des, to his son. The inscription at Raju is 119 years prior in date to that at Ratenpur. Jagatpál and Prithi Deo therefore may have been contemporaries; but it is useless to speculate on the point, until the two inscriptions have been correctly decyphered.

"One tradition is that Jagatpál was Raja of a place called Rajmahl Turar now the village of Rakkah; and that having married the daughter of a Raja of Drúg he transferred his residence to that place. Respecting Turar I have at present no information. Drúg, is a town situated twenty-five miles west from Rypur, and is the head of a Pergunnah of that name. At Drúg the tradition is, that Raja Jagatpál or one of his ancestors, built the fort there, but nothing further is known regarding him.

"I have mentioned the inscription at Ratenpur. I enclose a list of all the inscriptions that have been found in Chattísgher and on its borders."*

* *Memorandum of Inscriptions found engraved on stones in Chattisgher.*

1 Stone within the Fort of Rypur on a wall; Samvat 1458, and Sak 1323, Sarvajit nam Suontsir, Phagh Shudh Astami.

1 Stone near a Sonar's house; Samvat 1458; but his house more close to the Pagoda of Kakali at Rypur.

2

Ratenpur.

1 Stone within the Fort of Ratenpur, near the Badal Mahal; Samvat 915.

1 Stone on the gate of the Pagoda of Maha Mai, Samvat 1552.

2

Sirpur, on the Mahánadi.

Stones in the Pagodas of Mahadeo, viz.

1 Stone in the Sabha Mandap.

2 ditto on two pillars on both sides of the Mandap.

1 ditto on the Jote.

1 ditto on the first step as you go in—no dates on the whole.

5

Raju, on the Mahánadi.

In Ramchander's Pagoda.

1 Stone on the wall, 796 Samvat, Magh Shudh Ashtami Roz Budhwar.

1 ditto; no date on the 2d, there is another Inscription in the pagoda of Kuleswer and as the characters are defaced and illegible, a copy of it was not taken.

2

Aring, near the Mahánadi.

1 Stone under a pipal tree at Aring, without date.

Sibry Narain, on the Mahánadi.

1 Stone in the Pagoda of Vichitreswar Mahadeo, Samvat 919.

1 Stone in the Pagoda of Sangram Deo, Samvat 898, Ashwin Shudh Saptami, besides three in several places: the names of Karagers mentioned.

2

Kakair.

1 Stone on the gate of the Mahadeo. Samvat 1242. Ruvodri nam Suontser, Jesht Bad Panchami—also on a large stone, but the characters were all illegible.

Shawa, source of the Mahánadi.

Stone on the gate of the Kaneswar Mahadeo. Sak 1114.

Dhumteri, near the Mahánadi.

1 Stone in the fort of Dhamtery in the Pagoda of Lakshman without date.

Kerari, Pergunnah Ratenpur.

1 Stone, outside of the Pagoda, without date.

OBSERVATIONS.

The *Copper Plates* forwarded by Mr. Jenkins furnish specimens of a character which has not yet found a place amongst the varieties of monumental writing in India, hitherto offered to the public. This character, as observed by Mr. Jenkins, was unknown to the Brahmans where the plates were discovered, and they were in consequence supposed to be a record relating to the temple at *Raju* with which it will appear from the translation they have no connexion; they were equally unintelligible to the Pan-

Omerkantak—source of the Nerbadda.

1 Chatri, under which is the image of Rewa Nayak, below his feet is an Inscription. Samvat 922.

1 A loose stone on the walls of the Nerbadda Kund, no date.

1 As you go from the Pagoda into the Kund on the 1st step is written the name of Pila Bapu.

1 Before the image of Rewa Nayak is another image below the feet of which is also an Inscription.

4

Borea of Pandria.

1 Stone near a ruined Pagoda, which was broke into three pieces, and not complete, no date could be found.

1 Do. the Samvat is 849.

2

Kowerda.

1 Stone within the Pagoda, but loose, without date.

Bhyram Deo.

1 Stone under the Mandwa, loose, Sak Vikram 1406, Jynam Suontser.

2 Stones, on the South gate of the Bhyram Deo Pagoda on two sides in Rangri character, Samvat 1609 on one side—on the other was engraved thus 11 Makaradhwaj Jogi Saut Suo Barrakhko.

1 Stone, was on the South gate loose, the characters defaced.

1 Image is in the Sabha Mandap, people call it the image of Daserath—on the head and below the feet of which are some characters.

1 On the head of another image opposite to the Pagoda are also some names engraved. Samvat 1407.

6

Sahezpur.

1 Near the tank of the place is a tamarind tree, under which is an image called Sahasra Bahu's image. Samvat 934 below the feet, Kartik Shud Panchmi Roj Budhwar.

Gandye.

1 Outside of the village is a Pagoda of Mahadeo, on the gate of which, the names of the five Pandavas are engraved.

ALPHABET

of the Inscription compared with the

DEVANAGARI.

Printed at the Asiatic Lithographic Press in the Asiatic Researches

dits of Calcutta, but it fortunately happened that the establishment of the late Col. Mackenzie possessed an individual, Sri Verma Suri, a Jain of great respectability and learning, who had been long engaged in decyphering the inscriptions of the Dekhin, and to whom the character of the Raju plates was familiar and he accordingly prepared a transcript of the plates and a copy in Devanagari. There is every reason to believe in the genuineness of his version: he was examined at the time in various ways both by Captain Price and myself and underwent the scrutiny without any embarrassment or hesitation; the plates and copies were then taken from him and nothing more was said upon the subject for a period of more than two months, during which he was busily occupied in the analysis of a number of Jaina works preparatory to his retirement from active duty; after that interval he was called upon without previous notice or preparation to read his copy of the original, whilst his reading was checked by careful reference to the Devanagari transcript. As he accomplished this task with perfect readiness, and without the slightest deviation from the Devanagari version, little doubt could be entertained of his being really acquainted with the character: in fact the character, however uncommon the appearance which it assumes, is an obvious modification of the Devanagari, as will be seen by reference to the accompanying comparative alphabet. The principal difference, and that which most disguises them is in the heads of the letters. Instead of a plain horizontal line as in Devanagari, each character is surmounted by a kind of box or hollow square, the same with the figure of the inherent short vowel, which like the *matra* of the Devanagari letters it seems intended to represent; this peculiarity being recognized and a square instead of a rounded form being assumed by the whole of the characters, the inscription may be decyphered without any very great difficulty. According to Sri Verma's information this character is not in common use in any part of India but is confined to inscriptions: the fac simile of the plates with the Devanagari transcript, and the comparative alphabet will render these it is hoped decypherable generally in future.

The following is the translation of the inscription which records the grant of some lands by Tivara Deva, king of Kosala to certain Brahmins: the term Kosala originally designated Ayodhya or Oude, but its applicability to the western districts bordering on Gondwana and Berar is confirmed by other inscriptions.

TRANSLATION.

THE SEAL.—The engraved edict of the illustrious *Tivara Deva*,[1] king of *Kosala*,[2] granted for the enhancement of piety, and authenticated with his seal, bearing the impressed emblems of Garura, the Lotus, the Conch shell and the Discus.[3] May it endure as long as the moon and stars.

THE PLATES.—[4] Glory to the illustrious Tivara Deva, a monarch celebrated in (or by) Magaula,[5] the palace of the race of sovereigns, the ornaments of the three worlds, the giver of good to all who bear a worldly burthen, salutation be to him with the five auspicious prefixes to his honoured name.[6] The

1 The name might be here *Vara Deva* reading *Srimatto Vara*, instead of *Srimat Tivara* but it occurs in another place *Mahasiva Tivara* which establishes this reading: a more intelligible form would be *Trivara*.

2 The term Kosala is always applied to part of Oude, but its use in this inscription is confirmed by the employment of the term in other authorities from the same quarter, and a king of Kosala founded Ratenpur. It should appear therefore that the authority of the Oude monarchs once extended across the Ganges in this direction to the mountains and the sea.

3 The emblems of Vishnu.

4 It is very unusual for a grant to begin in this abrupt manner without the benedictory invocation of any deity. The omission might be thought to indicate some secession from the orthodox systems but the seal is positive testimony to the monarch's being a worshipper of Vishnu: the same is asserted in the inscription.

5 क्षितिभृत्कुलभवनमगौल स्तुत श्रीमत्तिवरदेवः। The real purport of this passage is quite unintelligible, and the original is probably not accurately represented by the Nagari letters.

6 The repetition of Sri five times which is frequently thus paraphrastically described.

nails of his feet are resplendent as a mirror with the reflected radiance emitted from the prostrate tiaras of innumerable princes; the tender palms of his hands are chafed by the tresses of those royal fortunes whom he has dragged captive: his merit in war is decorated with strings of pearl reddened by the blood starting from the brows of the elephants of his foes cleft by the edge of his well sharpened sword. He is as the destructive fire of ocean to his enemies conspiring against his invaluable treasures. His mild glory resembles that of the rising moon, and like the sea of milk he abounds with the most precious jewels, and as Garura,[1] afflicts the females of the serpent tribe, so he demolishes the saffron pendants that decorate the tender cheeks, over which the collyrium is washed by the tears that are drawn from the wives of his slaughtered foes. All his thoughts are intent upon the maintenance of morality, and he has been of old, venerable in devotion, in fame, in secrecy, in heart, in eye, and in body. He is never satisfied with (his own) excellence nor with making private, valuable, pure, and kindly gifts nor (with praising the dwelling of Chálakrauta Swami.[2] He abandons all improper desires. Though fierce to his foes he is of lovely appearance and is alike excellent in form and disposition. He is discontented with his store of moral merit, but is not covetous of wealth; he is not addicted to wrath but is desirous of honor and emulous of fame; he is no transgressor of observances and whilst he delights in eloquence does not indulge in sensual amusements: the lustre of his glory sprung from the combustion of his foes, burnt like a heap of cotton by the fire of his prowess, shines afar like the mountains whose rocks are covered with snow: the oppressions of the world being removed by the abundance of his piety, and every thorn being extracted by the needle of his sagacity, the eminent votary of Vishnu the great *Mahasiva*,[3] *Tivara Deva*, the son of *Nama Deva*, the son of *Indrabala*, the ornament of the *Pandu*

1 Garura is the deadly and implacable enemy of all snakes.

2 Another passage quite uncertain चालक्रौतस्वामिभवनस्य वज्रलपनेन (अविलप्तः)

3 Highly fortunate, is the import of this compound.

race,[1] having meditated on the merits of his parents, and having worshipped the Brahmans (in this place[2] called Pentáma bhuktiya Pimpari) thus decrees.

On the 12th of Jyeshta, having touched water, we have granted for the augmentation of the merit of our ancestors and our own, unto the sons of Bhatta *Gauri Datta*, named *Bhatta Bhava Datta* and *Bhatta Dhara Datta* Brahmans of the Madhyanjana branch of the Vajisanéya order of the Bharadwaja tribe.[3] *This village*,[4] to be had and enjoyed with all rights of treasure trove, wood and water, egress and ingress, and exempt from tax or toll.[5] Let them therefore dwell in it and possess it in peace as is proper and be all future kings thus admonished, "Those princes who give lands rejoice in heaven; those who usurp it fall into hell; consider well these two things. Life is transient and fortune fickle, and then act as seems best."

The fruit of protection and spoliation is as that of virtue and vice, and is heaven or hell. They cite the verses of Vyása[6] in proof.

The gifts made by the wise are gold, and land and cows, the daughters of the sun and forms of Vishnu; these three are established in the world, that a person may give either one or the other.

1 This seems to be the meaning of the text though it is not quite clear.

2 This is conjectured to be the meaning of *Padake*, the other words of the sentence are not Sanscrit and may possibly be the local names not very faithfully represented; the original is पेटाँमभुक्तिय पिम्परिपदकए)· Mr. Jenkins mentions the *Pyri* river in the vicinity of Raju and Pimpari may be connected with that.

3 These divisions are well known and are still extant in the south of India. Madhyanjana would more correctly be Madhyandina and Vajisaneyi, Vajipeya.

4 No name occurs here which renders it more probable that it has been inserted above.

5 Such is the general tenor of the provision but the exact words of the text are not fully made out; सनिधि सोपनिधि रचाभ प्रवेश दारक्षण सर्व्वाकरादान समेतो (ग्रामोयं।)

6 Or of the Vyása Gita; the phrase is व्यासगीत शास्त्र श्लोकमुदाहरन्ति।

A person who is prudent and wise and bestows land in gift shall enjoy heaven for 60,000 years and those who violate or contemn the donation shall remain in hell (as many.)

Land has been given by Sagara and other kings: such as is the land such is the reward and whether it be the gift of yourself or of others do thou Yudhishthira guarantee the grant: the gift of land is the best of gifts and its protection the first of merits. In the prosperous and victorious reign.*

OBSERVATIONS.

THE inscriptions *in the temple* at Raju were at first sent by Mr. Jenkins as copies, but fac similes were afterwards forwarded by him: one of these (No. 1.) presented a tolerably perfect inscription but the other was too much mutilated to be decypherable with any degree of satisfaction: it will be sufficient therefore to offer a translation of the first. Mr. Jenkins likewise forwarded a copy of No. 1. completed by the conjectural criticism of a pundit of great celebrity, but his conjectures were too fanciful to be admissible: he also supplied two translations prepared by native writers in his service with the assistance of the pundits, but as they were far from correct it is unnecessary to insert them; they contain however some passages to which reference will be made.

* What ensues and terminates the inscription is utterly unintelligible; भूरूह कार्त्तिकदिवसुसुष्टु मु may be supposed to specify a day in the month *Kartik* but it has been already stated that the grant was made on the 12th of Jyeshth, and how are these to be reconciled. It is stated by the decypherer that agreeably to some canon peculiar to Kernata, *Bhúrúha* might signify 824, and would thus imply the date of the year; there are no means of verifying his assertion; the period would not be incompatible with the dates of other inscriptions in the Chattisgher district, particularly that at Ratenpur, which is dated in Samvat 915 or A. D. 869.

TRANSLATION.

Salutation to Náráyana.

[1] _____

The delighter of the Pancha Hansa tribe and pure ornament of the Sri Rájamála family Takur Sri Nandilla,[2] by whom unjust princes were terrified —his younger brother and friend Vasudeva as if ——— the third was named Swami,[3]——the destroyer of enemies. By these an extensive country was subdued, upon which 5600 villages were dependant. The son of Swami was a hero ——————

Dor Séna was subdued, his younger brother's son[4] was Deva Sinha, by whom Komoni kshetra was conquered with 750 villages—the queen—Mahodayá——engaged in pious acts, mild, and the delight of her family ——a son of personal strength named Jagatpál[5] by whom the Kshetriyas that faced him were compelled to avert their countenances in flight.—— Scattering hostile armies with a multitude of arrows.

[The inscription is too much broken here to be translated connectedly.

1 In the translation received from Mr. Jenkins, the blank at the beginning of the inscription is filled up by the attributes of a country named Varahunré whence the prince was said to come; this is wholly fanciful as it is impossible to make out the words of this portion so as to attach any sense to it at all.

2 One translation calls this Siznadeo the other Sahistni; in the copy it appeared to be Khissala, in the fac simile it appears something like the name in the text but the form is indistinct. Both translations interpret this passage by giving three sons to one or other of the elder princes. It is not impossible that such may be the sense, and the third is expressed clearly enough.

3 One translation has Jaya Sinh, but the letters are too much defaced to authorise any reading.

4 The translators say *Vasudeva's* son; this is doubtful.

5 One translation makes Jagatpál the son of the first mentioned prince whatever his name may be (Siznadeo by Wodia-devi); the other does not specify his father: the word rendered in the fair transcript *Ebhi, by those,* is *Wádi* in the corrected copy whence the first translations were made: however if the lady were not the wife of more than one husband after the manner of the Malabars when *Ebhih* will mean *by them,* Jagatpál it can be little doubted is the son of Deva Sinha, the son of Swami, the brother of the first named prince or possibly brother's son.

It evidently relates however to the prowess of Jagatpál and as far as it is only panegyrical it does not merit to be particularly followed: it is only of importance to notice such passages as contain proper names apparently those of princes subdued or assailed by Jagatpál.]

The kingdom of the king Rantadeva[1] conquered by whose valourous deeds——truly meriting the name of Jagatsinh Prithivi Deva: in his kingdom the marriage rite being performed, a fort called Durga[2] was obtained. ——By the valour of his arm it was accomplished, and Jagatpál was the elephant who crushed the pride of his foes, by whom Kaheyara, a country pleasant with gardens and groves, was subdued, and Jagatpál city newly built, dedicated to a living representative of the supreme Ráma Deva. He is in this age *Arjuna* in piety, Jimutavahana in temperance, in valour he was as Ráma and like the son of Bhanu (the sun) in liberality, is a speaker of truth and venerator of the Brahmans, of his preceptor and the gods, a hearer of the Puranas and Vedas together with the Mahábhárat, and especial repeater of the Ramáyana as the source of life; wise and intelligent; as handsome in his person as Udayana was Jagatpála——this temple was erected——and the village of Sálmaliya granted to it for its support. Future princes will ever respect and protect the endowment.——The ruler of the place——The young brother of Jagatpála named Gájala whose valour is triumphant in the most perilous war, and another brother by a different mother was named Jayasinha, who effected the destruction of foes like Bali, the son of Indra. The chief in these districts was named Devaraja and by these assistants was the earth regulated. The grant of the king was recorded by Jasananda or Lakshmana, a poet, the son of the excellent pundit

1 The corrected inscription fills up one blank here with Jajjala deva, the *Ja* is clear enough; the following letters are defaced but they seem to warrant the correction.

2 The translations say this was called Droog also Sarhargerh, the former name still exists in the district as that of a town 25 miles west from Raipur and the head of a Pergunnah of that name, see Mr. Jenkins's letter: also with regard to the traditions at Droog regarding the foundation of its fort Jagatpál having become possessed of it by marrying the daughter of the Raja of Droog.

Jasovara, and distinguished for his intelligence and devotedness to Vishnu. The composition was sculptured by Rantahála in the year ——, on Wednesday, in the light fortnight of Magh, on the Rathashthami.

OBSERVATIONS.

The principal differences which occur between the preceding and the translations made by order of Mr. Jenkins, from the copy conjecturally completed, have been adverted to in the notes. They are of no great importance with one or two exceptions.

The country whence Nandilla and his brethren are supposed to have first invaded Chattísgher is one point of some moment, but from whatever quarter they may have come, it seems likely that a new dynasty did acquire dominion in this part of India, a short time before the grant recorded in this inscription: the translations referred to, make Jagatpál the *son* of one of three first princes, and the translation adopted calls him the *grandson* of the third brother, the difference is therefore of but one generation.

That Jagatpála founded and endowed the temple of Rámachandra is not only consistent with the traditions of the people, but derives some confirmation from the presence of the statue of the Raja in the temple as mentioned by Mr. Jenkins.

It is equally probable that he extended his power by conquest in the course of which Jajjala Deva and Rantadeva may have been subdued: the reference to Prithivi Deo, however accords better with the tradition noticed by Mr. Jenkins regarding Jagatpála's acquiring *Droog* by marriage, than with its being the prize of his valour.

The most important difference between the fac simile and transcript,

rough or corrected, and consequently between the translations, is in the date. In the copies it occurs distinctly *Samvat* 796; in the fac simile, the writing is here defective, as if the stone were mutilated, and the figure 9 is the only one that can be distinguished and this appears to be the leading figure: if not, the numeral preceding it is more like 8 than 7, so that in either case we have a variety of one or two centuries: the difficulty however may be determined by reference to the Ratenpur inscription mentioned by Mr. Jenkins, the date of which is Samvat 915, and in which the name of Prithivi Deo occurs.

A comparison of this and the preceding inscription, with those which remain to be decyphered in the province of Chattísgerh, seems calculated to illustrate the political and religious condition of that part of India in the 8th and 9th centuries: information that cannot but be acceptable in the utter gloom which envelops almost the whole of Hindustan anterior to the Mohammedan invasion.

Deva-Nagari Transcript of the Fac Simile of the Inscription in the temple of Raju Lochan.

ओं नमो नारायणाय। स्वस्ति। वज्रदरदसाक्षि विगट सटाविगत पञ्चमहासत्याभिनन्दित सुवर्णलकणौ परिन्दगोपसंकाश—जने पुरोयनवा—चिह्नसंयुक्त पञ्चहंसकुलानुरञ्जक श्रीरा जमाल कुलामलतिलक ठक्कुर श्रीगंदिल्ल नामाः। यन विन्नासिनखलाः भूमिपाला जनरञ्ज आविष्कृत वलणधिवरसमिरुपार्ज्जित। तस्यानुजो सखभ्राता वासुदेवो यथापि वा। यासि तंचाभवत् पुत्रं देशलचारिमर्द्दन। तृतीयः स्वामिनामथ रिपवः क्षयकारिणं। तेषां महा विलं देशनोशं विपद्य निसरन्। या पुनरन्नवसतः ग्रामाः षट्पञ्चाशटमतानि च। उपार्ज्जितं विहारेण पौरुषैर्भुजविक्रमैः। स्वामिपुत्रो महावीरो ——————गव——

——————तैः ग्रामैः दोर्ल्लीनं समुपार्ज्जितं ५ तस्यचानुजो पुत्रो देवसिंहमनूपमम्। सार्द्ध सप्तशत येन कोमिनो क्षत्र मण्डलं। ६ ।——————ठक्कुरानी——————महोदया। ——————सता कर्म्मरता सान्ता स्वकुलानन्दवर्द्धिनी। एभिः पुत्रो महावाहु जगत्पालोपि नामतः। संग्रामाभिमुखा येन विमुखा क्षत्रियाः कृता।——————सावत्रा मण्डले श्वराः। तथाप्यस्यप्र——————सर्व्वदा——————णगताः। तथाद्य शरसंघातैः निहनत् रिपुवा हिनीं। १० ।——————पिसंग्रामे वारणान्तरवाजिनां। गतास्त——————

। ११ । नि——————चर्म्मभ्यां खड्गपाणैर्महाहवे। निहणे त्यक्रसंघातं——————वारणे। १२। ओजा——————देवप्रभु राज्यकार्य्यं जगत्पाल् नाम रिपुगर्व्वहस्तो। उपार्ज्जिता येन सुवीरकृत्यै स्वराज्यं सतेरमं तमनालवेशं। १३। श्रीरन्तदेव नृपराष्ट्र——————

स्तलहारिन—उपार्ज्जितो येन सुवीरकृतै सता—सत्यं जगत्सिंहनाम । १४। पृथ्वीदेव वरतस्य राज्ये वैवाहिकं कृतं। दुर्गमे——————महादुर्गनीतं——————सरस्रामठः। ——————दुर्ग——————गृहीतं——————भवद। स्वबाहुना विक्रमयेन साधितं जगत्पाल नाम रिपुगर्व्वहस्तो। । कान्तारं कुसुम भोगंका——————नमेवच । देशं काकेयरं त्रापि नीतं येन——————लया। पराक रामदेवस्य राम सोनो विरुद्धसं। जगत्पालपुरं जातं कृते देशे पुनर्नवं। कलौ धर्म्मेषु कौन्तेय शान्तौ जीमूतवाहनः। विक्रमेणायधारामो दाने भानुभ वोपमः।——————सत्यवक्ता च द्विजदेवपूजकः। पुराणागमशास्त्रं श्रोता वै भारतादि भिः। रामायणमुखाः सर्व्वे वक्ता जीवकरोपिच। मनीषी ब्रह्माव——————नन्दोपिच । २१। उदयनवत् पुंसो जगत्पालोपि सुन्दरः। रामनाम सकाससप्रसादं कारितमिमं । २२। साल्मलोयं नाम ग्रामं नैवेद्याय निवेदितं। येच भूपाला भविष्यन्ति पालयिष्यन्ति तत् सर्व्वदा। स्थानपति यमनियम——————भगवन्तः श्रीमुतकात्मनामः। २३ । जगत्पालान्तजो भ्राता गाजलोपित्र दुर्धरं। विक्रमी दुष्टहन्ता च संग्राममजयद्वरं। २४। तत्सपलानुजोजातः जयसिंहोपिनामतः। विभ्रत् सक्रसोयमं वीरं वलिन् रिपुनाशनं। २५। प्रधानं तेषु राष्ट्रेषु देवराजापि नामतः। एभिस्तु पक्षसंयोगैः साधिता वसुन्धरा। २६। कु——————धा पुरीयान्वये महाम——श्वर परमवैष्णव महापण्डितठक्कुर ओजसो वरपुत्रेण द्विजदेवगुरु शुश्रूषाविरतेन मनीषिणा——————लक्ष्मनेणकविना ठक्कुर ओज सानन्द——नृपप्रशस्तिलिखिता स्वयं रूपकार श्रीरन्तपाल——लडुकी लिपिका संवत्सरे ८०१ माघमासि——शुक्लपक्षे रथाष्टम्यां बुधदिने लिखिता

Observations of Jupiter's Satellites at Benares in 1823—24.

Day.		Satellite Observed.		Mean time at Benares.			Long. deduced from the Nautical Almanac.			Long. deduced from the Connoissance des Tems.			Long. by comparison with Madras Obs.			Remarks.
1823			Sat.	h.	m.	s.	h.	m.	s.	h.	m.	s.	h.	m.	s.	
21	Nov.	Immersion	second	11	59	34	5	33	06	5	33	04	5	32	21,6	Dollond's Achr. Telescope.
	——	Immersion	first	12	13	36	5	31	36	5	31	51	5	32	21,8	Do.
23	——	Emersion	third	9	59	48	5	32	45	5	33	29				Do.
28	——	Immersion	first	14	06	27	5	30	54	5	31	08	5	31	15,8	Diagonal eyepiece used.
	——	Immersion	second	14	35	24	5	32	02	5	32	01	5	31	01,4	ditto—planet very high.
30	——	Immersion	first	8	35	09	5	31	13	5	31	27				Dollond's Reflecting Teles. 2 mts. later
	——	Immersion	third	10	58	14	5	32	33	5	34	10	5	31	28,8	Do. [than the other Telescope.
5	Dec.	Immersion	first	16	00	29,5	5	31	10,5	5	31	21,5	5	31	48,5	Achr. Tel.
	——	Immersion	second	17	13	05,5	5	32	49,5	5	32	49,5	5	32	12,1	ditto.
7	——	Immersion	first	10	29	12,5	5	31	36,5	5	31	48,5	5	32	05,4	Both Telescopes gave the same good observation. Achr. Tel.
12	——	Immersion	first	17	54	44	5	31	49	5	32	00				
14	——	Immersion	first	12	23	02	5	31	39	5	31	51	5	31	41	very clear—ditto.
16	——	Immersion	first	6	51	10	5	31	20	5	31	30				Reflecting Tel. 7 mts. later than the other
	——	Immersion	second	9	08	24	5	33	03	5	33	00				Do. 2 later than Achr. Tel. [pl. very low.
21	——	Immersion	first	14	16	43	5	31	26	5	31	36				Planet clear—satellite close.
23	——	Immersion	first	8	45	02	5	31	16	5	31	24				rather dull.
	——	Immersion	second	11	44	33	5	32	01	5	32	00				tremulous—satellite very close.
30	——	Emersion	first	12	51	41	5	31	56	5	31	47				good, but very close.
	——	Emersion	second	17	07	07	5	32	34	5	32	33	5	31	16,1	bad on account of closeness.
5	Jan.	Emersion	third	9	56	06	5	31	41	5	31	43	5	31	10	very good—Reflecting Telescope.
8	——	Emersion	first	9	14	14	5	31	24	5	31	24	5	31	35,3	very clear—ditto.
10	——	Emersion	second	9	03	05	5	31	58	5	32	00				good—ditto.
12	——	Emersion	third	13	57	21	5	31	49	5	31	52				very good—ditto always used hence-
13	——	Emersion	first	16	40	39	5	31	54	5	31	56				bad—Planet low and vapoury. [forward.
15	——	Emersion	first	11	08	51	5	31	28	5	31	30				very good, near zenith.
17	——	Emersion	second	11	40	08	5	31	39	5	31	40				very good.
22	——	Emersion	first	13	03	33	5	31	31	5	31	32	5	32	09,8	good and clear.
24	——	Emersion	first	7	32	11	5	31	26	5	31	26	5	31	52,2	very good.
29	——	Emersion	first	14	59	09	5	32	19	5	32	20				Bands hardly visible—low.
7	Feb.	Emersion	first	11	21	45	5	31	13	5	31	14				exceedingly clear.
14	——	Emersion	second	11	27	22	5	31	20	5	31	20	5	31	10	very good.
10	Mar.	Emersion	first	8	00	12,5	5	31	11,5	5	31	12,5				good sight—doubted at first.
14	——	Emersion	second	8	37	02,4	5	31	25,4	5	31	26,4				seen and doubted—very good.
31	——	Emersion	third	10	06	43,8	5	32	59,8	5	33	00,8				belts not quite clear.
9	Apr.	Emersion	first	10	11	25	5	31	48	5	31	49				good—belts not very plain.
15	——	Emersion	second	8	20	50,5	5	31	47,5	5	31	49,5				Planet very clear.
		Mean of ten Immersions of I Satellite,					5	31	24	5	31	35,7	5	31	50,5	
		Mean of ten Emersions of I Satellite,					5	31	37,1	5	31	37,0	5	31	51,8	
		Mean of five Immersions of II Satellite,					5	32	36,3	5	32	34,9	5	31	51,7	
		Mean of six Emersions of II Satellite,					5	31	47,3	5	31	48,1	5	31	13	
		Mean of one Immersions of III Satellite,					5	32	33	5	34	10	5	31	28,8	
		Mean of four Emersions of III Satellite,					5	32	18,7	5	32	31,2	5	31	10	

	h.	m.	s.	
Longitude of Benares by all the observations at Madras,	5	31	42	E.
by Nautical Almanack Tables for the I and II Satellites,	5	31	44,3	E.
by Connoissances des tems Tables for the I and II Satellites,	5	31	48,2	E.
Mean	5	31	45	E.

Eclipses of Jupiter's Satellites observed and communicated by Walter Ewer, Esq.

1823.

Nov. 14. Camp at Begur, Latitude North 29° 26′ 36″.

	h.	m.	s.	
Imm. II Satellite gave Longitude by Naut. Almc.	5	02	00	E.
Imm. I Satellite, ...	5	01	43	

—— 30. Camp Kaliraon, Latitude North 29° 17′ 44″.

					Tabular Long.			By Benares observation.		
	h.	m.	s.		h.	m.	s.	h.	m.	s.
Imm. I Sat.	8	06	24,5	gives	5	02	28,5	5	03	00,5

1824.		Tabular Long. h.	m.	s.	By Benares observation. h.	m.	s.
April 2.	At Delhi, Emer. I Satellite	5	08	48	———	———	———
9.	Emers. I Satellite	5	08	41	5	08	38
15.	Emers. II Satellite	5	08	47	5	08	54,5
25.	Emers. I Satellite	5	08	45,5	———	———	———
	Mean	5	08	47,9	5	08	46,2

Observations by Captain Colvin, communicated through Mr. Ewer.

At fort of Hansi, lat. 29° 06′ 13″

1823.		Tabular Long. h.	m.	s.	By Benares observation. h.	m.	s.
Nov. 14.	Imm. II Satellite ..	5	04	13			
	Imm. I Satellite	5	03	39			
19.	Imm. I Satellite	5	03	01			
21.	Imm. I Satellite	5	03	28	5	03	07
	Imm. II Satellite ..	5	04	28	5	03	37
	Mean	5	03	45,8	5	03	22

In the foregoing comparisons the Longitude of Benares is assumed at 5 h. 31 m. 45 s. east of Greenwich.

Observations of the Eclipses of Jupiter's Satellites at Benares in 1823—24.

Date.	Satellite.	Benares Time.	Longitude deduced. By Nautical Almanac.	Connoissance des Tems.	Mr. Goldingham's Madras Observations.	Col. Beaufoy's Bushey Park Observations.	Remarks upon the Benares sights.
1823.		h. m. s.	h. m. s.	h. m. s.	h. m. s.	h. m. s.	
Nov. 21	Imm. II.	11 59 34	5 33 06	5 33 04	5 32 21,6		Dollond's Achr. Telescope used (5 feet Refractor.)
	I.	12 13 36	5 31 36	5 31 51	5 32 21,8		Do.
23	Em. III.	9 59 48	5 32 45	5 33 29			Do. 26th { Im. of IV. had taken place ½ an hour bef. the time given in the Alm.—&the Em. did not take place for ½ an hour after its time.
28	Imm. I.	14 06 27	5 30 54	5 31 08	5 31 15,8		Diagonal eyepiece app. wh. diminished the light.
	II.	14 35 24	5 32 03	5 32 01	5 31 01,4		Do.
30	I.	8 35 09	5 31 13	5 31 27			Dollond's four-feet Reflecting Teles.—Planet low.
	III.	10 58 14	5 32 33	5 34 10	5 31 28,8		Ditto—Emersion not visible although marked so in the Ephemeries.
Dec. 5	I.	16 00 20,5	5 31 10,5	5 31 21,5	5 31 48,5		
	II.	17 13 05,5	5 32 49,5	5 32 49,5	5 32 12,1		
7	I.	10 29 12,5	5 31 36,5	5 31 48,5	5 32 05,4		Both Telescopes used—gave the same instant—
12	I.	17 54 44	5 31 49	5 32 00		5 32 04	Good—Jupiter high. [very clear.
14	I.	12 23 02	5 31 39	5 31 51	5 31 41		
16	I.	6 51 10	5 31 20	5 31 30			Reflecting Tel. Jup. low—Refrag. Tel. gave 7 sec.
	II.	9 08 24	5 33 03	5 33 00			Ditto—higher—ditto—2 ditto. [earlier.
21	I.	14 16 43	5 31 26	5 31 36			Planet clear—Satellite close to him. Refrag. Tel.
23	I.	8 45 02	5 31 16	5 31 24			Planet dull—too early.
	II.	11 44 33	5 32 01	5 32 00			Planet tremulous.
30	Em. I.	12 51 41	5 33 56	5 31 47			Good Obs. but Satellite very near.
1824.	II.	17 07 07	5 32 34	5 32 33	5 31 16,1		Bad—Satellite emerged from behind ♃'s Disc.
Jan. 5	III.	9 56 38	5 31 41	5 31 43	5 31 10		Very good—Reflect. Tel. always used hereafter—
8	I.	9 14 14	5 31 24	5 31 24	5 31 35,3		Good—very clear atmosphere. [Imm. not visible,
10	II.	9 03 05	5 31 58	5 32 00			Good observation. [altho' marked so in the alm.
12	III.	13 57 21	5 31 49	5 31 52		5 31 40	Good.
13	I.	16 40 39	5 31 54	5 31 56		5 31 05	Jupiter low and vapoury.
15	I.	11 08 51	5 31 28	5 31 30			Very good—Planet near Zenith.
17	II.	11 40 08	5 31 39	5 31 40		5 31 00	Very good—18th Immersion of III. invisible.
22	I.	13 03 33	5 31 31	5 31 32	5 32 09,8		Good observation.
24	I.	7 32 11	5 31 26	5 31 26	5 31 52,2		Good—Emersion II. obscured by clouds.
29	I.	14 59 09	5 32 19	5 32 20		5 32 15	Jupiter low—Bands hardly visible.
Feb. 7	I.	11 21 45	5 31 13	5 31 14			Exceedingly clear—14th cloudy.
18	II.	11 27 22	5 31 20	5 31 20	5 31 10		
Mar. 10	I.	8 00 12	5 31 11	5 31 12			Good sight.
14	II.	8 37 02	5 31 25	5 31 26			Very good.
31	III.	10 06 44	5 33 00	5 33 01			Pretty good—belts not clear.
April 9	I.	10 11 25	5 31 48	5 31 49			Not well defined—Jupiter low.
15	II.	8 20 50,5	5 31 47,5	5 31 49,5			Good.

Longitude of Mr. Cracroft's Observatory.

By the First Satellite.

Immersions. Nautical Almanac.	Connois. des Tems.	*Emersions.* Nautical Alm.	Connois. des Tems.
5 31 36	5 31 51	5 31 56	5 31 47
5 30 54	5 31 08	5 31 24	5 31 24
5 31 13	5 31 27	5 31 54	5 31 56
5 31 10,5	5 31 21,5	5 31 28	5 31 30
5 31 36,5	5 31 48,5	5 31 31	5 31 32
5 31 49	5 32 00	5 31 26	5 31 26
5 31 39	5 31 51	5 31 19	5 31 20
5 31 20	5 31 30	5 31 13	5 31 14
5 31 26	5 31 36	5 31 11	5 31 12
5 31 16	5 31 24	5 31 48	5 31 49
5 31 24	5 31 35,7	5 31 31	5 31 31

By the Second Satellite.

Immersions.	*Emersions.*
5 33 06	5 32 34
5 32 03	5 31 58
5 32 49,5	5 31 39
5 33 03	5 31 20
5 32 01	5 31 25
	5 31 47,5
5 32 36,5	5 31 47,3
5 32 11,9	

By the Third Satellite.

Immersions.	*Emersions.*
5 32 33	5 32 45
	5 31 41
	5 31 49
	5 33 00
5 32 33	5 32 18,8
5 32 26,8	

	h. m. s.	
Mean of ten Immersions First Satellite, ...	5 31 29,8	
ten Emersions ditto, ...	5 31 31	
Mean of eleven Imm. and Em. of the Second Satellite, ...	5 32 11,9	
Mean of five Im. and Em. of the Third Satellite, ...	5 32 26,4	
Mean of fifteen comparative Observations at Madras, ...	5 31 41,9	
Mean of five comparative Observations at Bushey Heath, ..	5 31 36,8	
Mean of the whole, ...	5 31 46,75	
Mean, rejecting the II. & III. Satellites,.....	5 31 35,5	E. nearest correct Longitude.
To which adding difference of meridian,.....	08	(according to Survey of Benares.)
Longitude of the Man Mundil or Hindu Observatory,	5 31 43,5	E. or 82° 55′ 52″,5 East of Greenwich.
Longitude according to Reuben Burrows, ...		82 59 45

Eclipses of Jupiter's Satellites observed and communicated by Walter Ewer, Esq.

1823.

Nov. 14. Camp at Begur, Latitude North 29° 26′ 36″.

	h.	m.	s.	
Imm. II Satellite gave Longitude by Naut. Almc.	5	02	00	E.
Imm. I Satellite, ...	5	01	43	

—— 30. Camp Kaliraon, Latitude North 29° 17′ 44″.

					Tabular Long.			By Benares observation.		
	h.	m.	s.		h.	m.	s.	h.	m.	s.
Imm. I Sat.	8	06	24,5	gives	5	02	28,5	5	03	00,5

1824.		Tabular Long. h.	m.	s.	By Benares observation. h.	m.	s.
April 2.	At Delhi, Emer. I Satellite	5	08	48	———	———	———
9.	Emers. I Satellite	5	08	41	5	08	38
15.	Emers. II Satellite ..	5	08	57	5	08	54,5
25.	Emers. I Satellite	5	08	45,5	———	———	———
	Mean	5	08	47,9	5	08	46,2

Observations by Captain Colvin, communicated through Mr. Ewer.

At fort of Hansi, lat. 29° 06′ 13″

1823.		Tabular Long. h.	m.	s.	By Benares observation. h.	m.	s.
Nov. 14.	Imm. II Satellite	5	04	13			
	Imm. I Satellite	5	03	39			
19.	Imm. I Satellite	5	03	01			
21.	Imm. I Satellite	5	03	28	5	03	07
	Imm. II Satellite	5	04	28	5	03	37
	Mean	5	03	45,8	5	03	22

In the foregoing comparisons the Longitude of Benares is assumed at 5 h. 31 m. 45 s. east of Greenwich.

Transit of Mercury over the Sun's Disc on the 4th November, 1822.

	h.	m.	s.
Observed by Mr. Walter Ewer at Kurnal.			
Mean time of 2nd internal contact, ...	20	43	46,5
external ditto, ...	20	56	16,5
Difference, ...		2	30
End of transit of ☿'s centre, ...	20	55	01,5
Observed by Mr. William Cracroft at Jionpoor.			
Mean time 2nd internal contact, ...	21	16	08
external contact, ...	21	18	48
		2	40
End of Transit of ☿'s centre, ...	21	17	28
Observed by Lieut. Maxwell at Meerut, with an inferior telescope.			
Mean time 2nd internal contact, ...	20	57	17,2
external contact, ...	20	59	03,6
		1	46,4
End of Transit of ☿'s centre, ...	20	58	10,4

Observed at Calcutta by

	Capt. Hodgson.			*Capt. Herbert.*			*Capt. Schalch.*		
	h.	m.	s.	h.	m.	s.	h.	m.	s.
Apparent solar time of 2nd internal contact,	21	54	49,1	21	54	57,1	21	55	01,8
external ditto,	21	57	01	21	57	10	Uncertain.		
Mean end of Transit,	21	55	54,5	21	56	03,1	21	56	14,8
				21	56	04,1			
				16	02	17			

Greenwich time 5 53 47,1 = Long. of Calcutta.

As the effect of parallax for the above four places is small, from the displacement of Mercury being nearly in the direction of the tangent to the sun's disc at the point of Emergence, the longitudes of the places, found by the differences of mean time, will not be far from the truth: therefore assuming Calcutta to be in longitude 5 h. 53 m. 30 s. according to Captain Schalch's observations we shall have

	h.	m.	s.	
Jionpoor,	5	31	09	east of Greenwich.
Meerut,	5	11	51,4	
Kurnal,	5	08	42,5	

The Longitude of Jionpoor by an Emersion of Jupiter's first Satellite on the 20th Dec. 1822, was found to be 5 h. 31 m. 08 s.

Occultation of Antares by the moon.

Benares, 27th April, 1823.

	h.	m.	s.
Star disappeared at meantime,	17	17	34,8

The Emersion was invisible on account of day light.

Latitude of Jionpoor by William Cracroft, Esq. 1823.

By Alpha Orionis, ...	25°	44′	20,6″
Sirius, ...	25	44	23,6
Procyon, ...	25	44	25,7
True Latitude,	25	44	23,3 North.

No. II.

Table of Multipliers for ascertaining the Deviation of a Transit Instrument from the Meridian, and at the same time the Error of the clock by observing the Transit of two fixed Stars, calculated for the Lat. of Benares, from the rules laid down in Mr. Baily's paper published in the 1st number of the Memoir of the Lond. Asiatic Society. By William Cracroft, Esq.

Diff. of N. P. D. (N. ± S.)	Declination of Northern Star.													
	5	10	15	20	25	30	35	40	45	50	55	60	65	70
30	1,998	2,048	2,061	2,048	1,998	1,928	1,814	1,670	1,542	1,337	1,151	958	766	580
35	1,664	1,722	1,751	1,751	1,722	1,664	1,581	1,472	1,343	1,198	1,040	874	706	541
40	1,405	1.468	1,506	1,520	1,506	1,468	1,405	1,319	1,212	1,090	954	809	660	510
45	1,194	1,263	1,3[illegible]9	1,332	1,332	1,309	1,263	1,194	1,106	1,004	884	754	622	485
50	1,017	1,090	1,143	1,175	1.185	1,175	1,143	1,090	1,017	929	825	710	590	464
55	865	941	999	1,040	1,059	1,059	1,040	999	941	865	775	673	562	446
60	730	809	873	920	949	958	949	920	873	809	730	639	538	430
65	608	690	758	811	847	866	866	847	811	758	690	608	516	416
70	496	580	652	711	754	781	790	781	754	711	652	580	496	403
75	390	477	553	618	667	702	719	719	702	667	618	553	477	390
80	290	378	459	528	584	625	651	660	651	625	584	528	459	378
85				441	503	552	585	602	602	585	552	503	441	366
90					424	469	520	545	553	545	520	469	424	356
c =	941	917	894	869	841	811	779	742	700	647	585	506	397	298

The Transit Instrument being placed nearly in the meridian, by following a fixed Star till the moment of its culmination, and all the adjustments being examined, observe the times of the transits of two fixed stars which differ much (at least 30°) in declination, and very little in R. A. If the Timekeeper shew Solar time, reduce the observed interval to side real time and compare it with the interval between the true apparent R. As. in the following form.

R. A. of N.*	Obs. Transit of N.*
R. A. of S.*	Obs. Transit of S.*
Diff. of R. A.±	Diff. of Obs. Transits±
	Diff. of R. A.±
	Error in R. A.±
	Multiplier from Table,
	Required Deviation in time ±

To be multiplied by 15 to give it in are.

If the sign be plus the deviation is East and vice versâ.

The deviation being in time, and multiplied by the numbers of the lower line (c) and applied to the difference between the observed transits will denote the error of the clock.

Deviation±
Multiplier (c)

Product±
Diff. of Obs. Tran.±

Error of clock.±

No. III.

METEOROLOGICAL JOURNAL,

By JAMES PRINSEP, Esq.

I have condensed into the annexed Table the results of the past years' observations upon the climate of Benares presenting in one page, the substance of a volume of figures, each item nearly being the mean of thirty numbers. Though attended with some labour, this is really the only shape in which a Diary of the sort

can be turned to any useful purpose, and if we could obtain similar abstracts from other chief stations on the Indian continent, the advantages would be much enhanced by the correct comparison we should be enabled to draw of their relative climates, the light which would be thrown upon the origin, course and extent of the hot winds; the altitude of different places; and other interesting phenomena.

My own observations have now been continued for two years, but I shall only give at length those for the latter year, as the instruments then used were more numerous and complete. For the sake of perspicuity I will notice under separate heads the subjects of Barometrical pressure, temperature, and hygrometry.

I. *The Atmospheric Pressure.*

The Barometer used is by Dollond, having a window of talc adapted to the reservoir to shew the level of the mercury. Notwithstanding this however, by a careful comparison with Captain Herbert's instrument, it stands .079 lower than the Barometer at the Surveyor General's Office in Calcutta. Indeed very few can be found to agree perfectly, nor is it necessary provided their difference be once ascertained. Mine stands nearly the mean of five that were examined together.

The amount of the daily oscillation of the Barometer is not shewn by my table as I was unable to observe at the hour of the maximum, 10 o'clock A. M. The difference however between the evening and noon height for each month shews a greater oscillation during the hot months, when the daily change of the thermometer is also the greatest. The close connection between the rise of the thermometer and fall of the barometer is confirmed by the following comparison which the kindness of my friend Dr. A. Russell permitted me to calculate from a diary of three years kept by himself.*

	Dr. Russell.	*Benares.*
Month.	Mean daily range of the Barometer.	Mean range of the Thermometer.
January,	0.073	21.5
February,	0.098	21.0
March,	0.093	24.0
April,	0.103	26.5

* In the year 1824 I shall register the Barometer and Thermometer at 10 A. M. and 5 P. M. on purpose to ascertain the amount of daily oscillation.

Month.	Barometric range daily.	Thermometric range daily.
May,	0.103	23,4
June,	0.084	20,3
July,	0.062	9,3
August,	0.068	8,9
September,	0.070	9,5
October,	0.070	16,0
November,	0.070	18,4
December,	0.075	15,7

There can be very little doubt therefore that the change of atmospheric pressure is simply caused by the altered specific gravity of the air due to the temperature. The same effect should be visible to a greater extent in the monthly variation of the two instruments, because a wider stratum of air is influenced by the *monthly* change of heat, than can be by its *daily* action. To compare the actual motions, I here present the monthly differences of the Thermometer and Barometer from the annual mean of each, extracted from my Table.

	Barometer.	*Thermometer.*
Month.	Annual Mean 29.538	Annual Mean 76,94
January,	+ 0.236	— 17.28
February,	+ 0.198	— 10.98
March,	+ 0.087	+ 3.06
April,	— 0.067	+ 12.39
May,	— 0.115	+ 13.90
June,	— 0.275	+ 15.55
July,	— 0.301	+ 5.26
August,	— 0.220	+ 4.05
September,	— 0.122	+ 4.39
October,	+ 0.071	— 0.59
November,	+ 0.237	— 12.78
December,	+ 0.265	— 16.94

The effects here are just five times greater than in the former table: although they are still only one-third of what would be produced if the whole atmosphere were alike acted upon; that is, if the whole air were heated

	5 degrees	the pressure should fall	0.300 inches,
whereas	15	in a month it falls	0.300
and	25	in a day	0.100

In a rough way it may therefore be said that the monthly heat is felt to a height of two miles, and the daily to a height of one-fifth of a mile.

The chief advantages of a Barometric register, are the means it affords of finding the respective altitude of places: to this point I have paid all the attention in my power, particularly to the determination of the height of Benares above Calcutta; for which the Register published (but again discontinued) by the Surveyor General's Office afforded me the principal data.

The heights of the Barometers at the same hours at the two places, corrected to the same index, and both reduced to the temperature of 32° Farh. give the following differences;

	inch.
April, 1822, ...	0.263
June, ...	0.261
Ditto, noon, ...	0.258
August, ...	0.263
December, ...	0.240
January, 1823, noon,	0.214
Ditto, 5 p. m.	0.214
February, noon, ..	0.265
5 p. m.	0.217
April, noon, ...	0.261
May, ...	0.250
June, ...	0.289
July, ...	0.239
August, ...	0.268
September, ...	0.250

Mean of the whole.

inches.

0.2501

or Calcutta Barometer, 29.9000

Benares, ... 29.6499

Captain Hodgson has omitted to give the temperature of the external air in his tables, but supposing the mean to be 80°, the Barometrical altitude of Benares above Chowringhee is 246.75 feet. I believe Capt. H. estimated it at 500 feet.

A few comparisons of a similar nature made with Captain Herbert, give the height of Cawnpoor 133.3 feet above Benares.*

* Since writing the above, some further communications from Captain Herbert have enabled me to calculate the heights of three other places above Benares; namely,

Futtigurh Cantonments, from six comparisons, ... 249.0 feet.

Bumouree, foot of the hills, from six comparisons, ... 1467.4 feet.

Almorah, from three observations in January, 1824, ... 4867.0 } mean 4838.75 feet.
from five ditto, in February, ... 4810.5 }

I hope next year with Capt. Herbert's assistance to deduce the altitude of Suharanpoor from a more accurate series.

While upon the subject of the Barometer I should mention that Adie's Sympiesameter was also registered, and for sometime it agreed very well, but at the end of the first year the bulk of air above the oil was found increased in quantity 3-10ths and after the second year 2-10ths of an inch so that no dependence could be placed upon its readings, except for a short period.

TEMPERATURE.

The several Thermometers used by me were compared with a Standard Instrument made by Dollond, and divided to fifths of a degree. The external ones were situated in a northern veranda perhaps hardly sufficiently exposed to the air, but entirely sheltered from the sun's rays. The in-door ones were in a northern apartment closed during the day and without tatties. As the observations were made five times a day including the extremes noted by the self-registering thermometer, I was able to construct for each month a curve whose ordinates expressed the temperature for each half hour of the day; the means of these are denoted in the 10th column under the title "Mean of the twenty-four hours;" they differ little from the morning and evening means.

From the whole mass of observations the temperature of the air is found to be 77 degrees, being 3 degrees lower than the mean heat of a well 36 feet deep which was found in

August, 1822, ...	80°	95′
December, ...	78	20
April, 1823, ...	80	50
December, ...	80	00
	79	91

In the close streets of the city, where the heat is not so easily dissipated as at Secrole, a diary kept by my pundit gives a mean result of 79° 22′.

All of these contradict the formula of Mayer which ascribes only a mean temperature of 74° 7′ (— 1° for an altitude of 300 feet above the sea) = 73° 7′ for the latitude of Benares 25° 21′.

In the month of May for several days the thermometer rose to 111° 5′ and in January it fell at night to 45° including a range of 66 degrees.

HYGROMETRY.

The instruments used in measuring the evaporation and rain were described upon a former occasion:* their performance has been very satisfactory, and the column of Professor Leslie's Atmometer, I think, points out some respects in which the latter instrument seems inferior to my own. Where the evaporation was very rapid the porosity of the earthen bulb was inadequate to the supply (although I always used distilled water) and when the air took up but little moisture, it was impossible to prevent the accumulation of a large drop of liquid under the bulb which either fell, or increased the evaporating surface.

By two months comparison I found that the evaporation from a large vessel was just one-fourth less than from my small cup, so that the general annual evaporation amounts to fifty inches.

The mean temperature marked by the wetted bulb thermometer agrees almost exactly with the mean lowest daily temperature, one being 68° 92′ the other 68° 88′ and this is 9 degrees below the mean daily heat. In the hot winds I have frequently observed a difference of more than 30 degrees between the dry and wet thermometers.

The quantity of rain in 1823 was so much greater than usual, that it can form no basis for calculation. In 1819 there fell but 30 inches at a small distance from Benares, and I should think in general that there must be less here than in Bengal. Mr. James Kyd of Calcutta favored me with the result of a register kept by himself with a reservoir of 100 square feet area which for comparison's sake I here subjoin:

Month.	Rain.	Evaporation.
October, 1821,	3.00	2.25
November,	0.00	2.25
December,	0.00	1.00
January, 1822,	0.00	1.00
February,	0.00	2.00
March,	0.00	5.00
April,	0.00	7.50
May,	1.00	6.00
June,	12.12	1.85
July,	9.63	1.62
August,	2.50	1.87
September,	3.00	1.75
	Rain 33.25 inch.	Evap. 34.09 inches.

* See the accompanying plate and description.

Month.	Hours.	Barometer.	Evaporation.		Atmometer.		Rain.	Winds.	Weather.
			Day and night.	Monthly.	Day and night,	Monthly.	Monthly.		
				Inches.	Inch.	Inches.	Inches.		
January,	7 a. m.	29.78		3.115	0.043	4.157	0.005	Calms and W.	Clear sky to the 14th then cirri.
	noon.	29.83							
	5½ p. m.	29.76			0.091				
February,	7½ a. m.	29.75		3.765	0.060	4.781	1.724	W E	clear, some storms.
	noon,	29.76							
	5¾ p. m.	29.71			0.112				
March, (*Interpolated*)	7 a. m.	29.66		8.742	0.080	8.990	1.455	W	fine weather.
	noon.	29.68							
	6 p. m.	29.59			0.210				
April,	6 a. m.	29.49		14.376	0.121	13.830		W	steady hot winds.
	noon.	29.53							
	6 p. m.	29.4			0.340				
May,	6 a. m.	29.4		13.496	0.116	11.931	4.235	W Calms E	hot winds and dry, squalls—gale.
	noon.	29.48							
	7 p. m.	29.39			0 268				
June,	6½ a. m.	29.28		7.036	0.065	6.507	5.532	N E Calm	frequent calms and cloudy.
	noon.	29.29							
	7 p. m.	29.2			0.151				
July,	6½ a. m.	29.2		2.081	0.023	2.438	25.410	W. Calms E Calms W	very heavy rains.
	noon.	29.27							
	6¾ p. m.	29.21			0.055				
August,	6¾ a. m.	29.32		2.647	0.043	3.200	32.229	W E W Calms	Rain with west and east winds.
	noon.	29.35							
	6¾ p. m.	29.31			0.063				
September,	6½ a. m.	29.4		2.291	0.034	2.768	16 324	Calms W E	still wet—fair and squalls.
	noon.	29 4							
	6 p. m.	29.39			0.058				
October,	7¼ a. m.	29.6		3.644	0.043	4.368	0 316	Calm W Calm	very fine.
	noon.	29.6							
	5¾ p. m.	29.5			0.098				
November,	8½ a. m.	29.8		2.802	0.047	broken. 3,500 ?	0.740	Calms W	very fine.
	noon.	29.8							
	5½ p. m.	29 7			0.073				
December,	8¾ a. m.	29.8		1.574	0.022	2.000 ?	1.530	Calms W	clear and cold.
	noon.	29 8							
	5¼ p. m.	29.7			0.042				
Means 1823,				65.569		68 470	89.500		
Do. 1822,				68.315					

Abstract of a Meteorological Journal kept at Benares during the year 1823.

Month.	Hours.	Barometer.	Mean of morn. and even. observations.	Thermometers. In-doors	Mean.	Out of doors.	Mean.	Extremes.	Mean of extremes.	Mean of the 24 hours calculated.	Thermometer with wet bulb out.	Mean.	Deduced Dryness	Hygrometer. Morn. & Even.	Mean.	Evaporation. Day and night.	Monthly	Atmometer. Day and night.	Monthly.	Rain. Monthly.	Winds.	Weather.
January.	7 a. m.	29 786		59 03		51 51		50.34			47.93		(Leslie's)	91 3		Inch. 0 028	Inches.	Inch. 0 043	Inches.	Inches.	Calms	Clear sky to the
	noon.	29 835	29 774	63.70	62 49	68 18	59.46		61 11	59o 66	59 41	54 75	25°,9		83,9		3.115		4.157	0.005	and	14th then cirri.
	5½ p m.	29 762		65 95		67 63		71 88			60 45			73 6		0.072		0.091			W.	
February,	7½ a. m.	29.755		64 00		58 91		56.63			54 90			89,9		0.040		0.060				
	noon.	29.767	29.736	68 34	67 53	73 83	66 02		67.11	65 96	62 48	58 80	39°,7		82,1		3 765		4 781	1.724	W	
	5½ p. m.	29.719		71.05		73.13		77.60			62.71			75,1		0 095		0.112			E	clear, some storms.
March.	7 a. m.	29.660		73.57		71.30		66.50			58 30			80,0		0.065		0.080				
(Interpolated)	noon.	29 684	29 625	78 12	77 07	92.00	79 80		78.35	80 00	67 50	62 80	93°,5		76,0		8.742		8.990	1.455	W	fine weather.
	6 p. m.	29.590		80 57		88 30		90.20			66.30			72 0		0.217		0 210				
April,	6 a. m.	29 497		80 12		76.70		75.74			64 06			73 1		0.104		0 121				
	noon.	29 539	29.471	84 87	83 94	99 04	83.07		88.97	89.33	72 00	67.55	101.9		65,7		14.376		13.830		W	steady hot winds.
	6 p. m.	29.416		87.46		95.45		102.20			71 05			58.4		0.375		0.340				
May,	6 a. m.	29 419		83.97		84.19		78 85			70 09					0.103		0.116			W	
	noon.	29.487	29 423	87 79	86.76	96 70	90.11		90 53	90 84	75.78	72 01	99,5	bro	ken.		13.496		11.931	4 235	Calms	hot winds and dry,
	7 p. m	29.397		89.36		95.74		102.21			73 94					0.332		0 268			E	squalls—gale.
June,	6½ a. m.	29.287		87 27		89 08		83.3			82.07					0.071		0.065			N E	frequent calms
	noon.	29.296	29.263	90 03	89 36	96 75	91.90		93 43	92.49	84 73	81 58	56,8				7.036		6.507	5.532		and cloudy.
	7 p. m.	29 239		91 46		94 12		103.61			81.08					0.164		0.151			Calm	
July,	6½ a. m.	29.256		82 33		80 38		79.23			76.80					0.023		0.023			W. Calms	
	noon.	29.270	29 237	84 17	83.61	85.89	81.06		83.90	82.20	82.85	78.40	14 ,6				2.081		2.438	25 410	E	very heavy rains.
	6½ p. m.	29 218		84.89		81 74		88 58			80.01					0.044		0.055			Calms W	
August,	6½ a. m.	29 325		81.76		79 58		78.31			78 97					0.030		0.043			W	
	noon.	29 359	29.318	82 72	82 81	84 29	80.00		82 78	80 90	81.67	79 70	1,2				2.647		3.200	32.229	E	Rain with west
	6½ p. m.	29 310		83.87		80.13		87 25			80.59					0.055		0.063			W Calms	and east winds.
September,	6½ a. m.	29.131		81.52		79 06		77.61			78 09					0.022		0.034			Calms	
	noon.	29 151	29 116	83 15	82.43	86.58	80.58		82 35	81 33	82.20	79.09	2, 7				2 291		2.768	16 324	W	still wet—fair and
	6 p. m.	29.308		83.31		82 10		87.08			80.00					0.054		0.058			E	squalls.
October,	7½ a. m.	29 644		75 02		71.70		69.75			69.76					0 032		0 043			Calm	
	noon.	29.663	29.610	78.32	78 37	82 72	76 32		77 74	76 35	72.60	71.49	26,5	repla	ced.		3 644		4 368	0 316	W	very fine.
	5½ p. m.	29.594		80.82		80.95		85.72			73.23					0.086		0.098			Calm	
November,	8½ a. m.	29 806		66.12		61 95		57.24			59 04			97,2		0.036		0 047	broken.			
	noon.	29 800	29.775	70.72	68.72	73.70	64.58		68.46	64.16	65.27	61.33	18 8		98,2		2 802		3,500 ?	0 740	Calms	very fine.
	5½ p. m.	29 744		71.31		67.22		75 00			63 63			99 3		0.060		0.078			W	
December,	8½ a m.	29 871		61.30		57 07		52 97			56 29			98,0		0.017		0 022			Calms	
	noon.	29 845	29.803	65.91	63.77	65 85	60.92		60.82	60 00	61 98	58.44	15,8		91,6		1.574		2.000 ?	1.580	W	clear and cold.
	5½ p. m.	29 769		66.24		61 77		68.67			60.50			87.3		0 034		0.042				
Means 1823,			29 538		77 21		70°.10		77°.80	76°.94		68°.92					65.569		68 470	89.500		
Do 1822,			29 540		76.97		76.81				Mean of Minima,	68 88					68.315					

BRITISH MUSEUM

Pluviameters.

No. IV.

DESCRIPTION OF A PLUVIAMETER AND AN EVAPOROMETER CONSTRUCTED AT BENARES.

By James Prinsep, Esq. 1st Jan. 1823.

The Pluviameter with which I register the fall of rain at Benares, is made on the Syhon principle, the quantity is read off by simple inspection to any required accuracy; the loss by evaporation is almost prevented; and the instrument does not require to be handled in emptying it. Figure 3 represents the one now in use. It is composed of a bason at top of sufficient area, screwing on to the brass cap of a graduated glass tube, into which it opens by a small neck with a loose valve of talc to keep out dust, &c.

The tube contains a small glass syphon whose longer leg passes through the bottom of the tube, water-tight, and enters the lid of a copper reservoir below.

Each degree of the scale on the tube may correspond to .01 inch depth of rain on the area of the bason: (in mine each = .005 inch.) When 100 degrees are accumulated, or the tube is filled, the whole is drawn off by the syphon into the lower cylinder, where it marks unit upon a similar syphon connected exteriorly with the latter. This likewise empties itself when it has once become full.

Tin cases are applied for the protection of the glass tubes.

Fig. 2 was the original form of the instrument, and shews what may be done with broken bottles and retort necks and tubes, where brass workers are not to be met with.

Fig. 1 is an Evaporometer invented with the same view of reading off the depth of Evaporation by inspection, and magnified. The ratio of the area of the bason, and length of the tube may be such that each degree on the latter may mark .01 or .001 inch depth of Evaporation from the former.

The instrument is charged by drawing the piston down to zero, and filling the tube with distilled water to a mark in the narrow neck at top. The water is then passed upwards into the cup, and the diminution ascertained by drawing down the piston until the neck-level is adjusted; and reading off the degrees marked by the piston's upper edge.

The lower cork serves to insure the prevention of leakage.

No. V.

ANALYSIS OF A MINERAL WATER.

By James Prinsep, Esq. 25th June, 1823.

Having heard that the water of the Bridhkâl kund (a well in the city of Benares) possessed slightly aperient medicinal properties when taken in large draughts, I procured a bottle full of it to submit to chemical analysis.

1. The water was clear, devoid of smell, and yielded no traces of iron.

2. Its specific gravity was 1005,9 at the temperature 92°.

3. 1000 grains weight left on evaporation to dryness 7.4 grains of deliquescent salts, of which alcohol dissolved 5.6 and the remainder proved to be carbonate of lime and a soluble sulphate.

4. The alcoholic solution manifested traces of muriatic acid magnesia, and by a simple test suggested by Woollaston, nitric acid. His method is this, to concentrate the solution of salts, and pour it into a test tube with a bit of gold leaf, warm it, and add a drop of sulphuric acid; if any nitrate accompanies the muriates, aqua regia is at once formed and the metal dissolved. I used platina foil in lieu of gold, since it has the advantage of telling whether the nitrate be of potash or soda; if the former, the metal is no sooner dissolved than a yellow powder precipitates.

5. The quantity of such acids and bases as were precipitable, were determined in different portions of water—1000 grains being taken for each, thus;

Nitrate of Barytes threw down Sulph. acid,	....	0.32 Grains.
Nitrate of Silver, ... Muriatic acid,	....	1.90
Oxalate of Ammonia, ... Lime, ...	....	0.75
Ammonia and Phosphoric acid (after the separation of the Lime) gave Magnesia,	....	0.32

6. The carbonic acid estimated from the Lime, amounted to .... 0.58 Grains.

7. The whole contents therefore of 1000 grains of the water may be thus stated;

Not taken up by Alcohol	Carbonate of Lime, ...	1.33 Grains.
	Sulphate of Soda, ...	0.75

Alcoholic solution	Muriate of Magnesia,	0.94
	Muriate of Soda,	2.10
	Nitrates (of Soda and Potash,)	2.46
		7.40

The presence of Magnesia was determined with much care, as to it may be attributed the purgative qualities of this water.

No. VI.

ABSTRACTED RESULTS OF MARINE OBSERVATIONS,

Made by G. A. Prinsep, Esq. and detailed in a letter of 7th March, 1823, Bombay.

By J. Prinsep, Esq.

1. In the course of several voyages in the Atlantic and Indian oceans, Mr. G. Prinsep has turned his attention to the solution of the two marine problems interesting to navigators as much as to philosophers, namely, "the Saltness or Specific Gravity, and the Temperature of the Ocean, on different parts of its surface."

He has compared his own numerous observations with a series made by Dr. A. Russell and myself on our passage to India in 1819, and with another subsequent voyage by Capt. Weynton: the result of his labors was sometime ago communicated to Dr. Marcet, of the Royal Society, but our meeting in Calcutta last winter having given occasion for the revisal of some of his Tables, when we compared our different Instruments together, this circumstance produced another letter to Dr. Marcet,* of which my brother has forwarded a copy. I have selected the general facts which he has deduced from the whole range of observations; as, in reality, the deductions themselves can be the only interesting part of such investigations to all but to the actual investigators.

I. 2. The absolute specific gravities of various parts of the Ocean, reduced to the Standard Temperature 60° Farnh. are as follows:

Mouth of the British Channel,	1027.2
Coast of Portugal to the Tropic,	1027.9
Thence to 15° North Latitude,	1027.9

* This worthy friend and excellent chemist died before this letter could have reached England.

Near the Banks of Newfoundland,	1027.5
Gulph Stream,	1027.5
West Indies and Gulph of Mexico,	1027.3
Equator Longitude 22° to 29° W.	1027.0
Ditto Ditto, 20° W.	1026.3
Coast of Brazil at 10° from land,	1027.8
Cape of Good Hope, out of the warm current,	1026.4
Ditto in ditto,	1027.3
S. E. Coast of Africa and Madagascar 27° S.	1027.0
27° to 18°	1026.7
17° to 11°	1026.2
10° to 0°	1026.6
Equator to 6° N. Longitude 55° to 60° E.	1026.5
Thence to 16° N. do. 60° to 70°.	1027.5
Mean of the whole,	1027.1
Greatest difference in open sea,	001.6

In both Oceans the verge of the Tropics seems to be the saltest part of the sea, and the Equator to be in the other extreme.

3. From the almost perfect uniformity of the sea's specific gravity all over the world, no use can be made of it in aiding the navigator, except perhaps in pointing out his proximity to the mouths of rivers, which diminish the saltness to a great distance from their embouchure. Off the Balasore Roads I found the specific gravity of superficial water 1019.4, of 10 fathom ditto 1021.9; while farther at sea in front of the Cuttak river, 1016. surface. In the Gulph of Mexico, the Hydrometer fell 003.2, 30 miles in front of the river Guasalualcos.

4. Water from a depth of 30 to 50 fathoms does not appear to be more salt than that of the surface, when allowance is made for its difference of temperature.

II. 5. The Temperature of the Ocean is calculated to be of greater use and easier avail to the Sailors—it points out with great certainty the existence of a current if it come from a different climate: thus in rounding the Cape in August, 1819, 100 miles south of the great bank I encountered the S. E. current which elevated the Thermometer rapidly from 57° to 65½°. It as suddenly declined when we had passed through the stream. My brother found similar indications in the American Gulph Stream.

In the Mexican Gulph which abounds with banks and shoals, my brother thought he met with confirmation of Dr. Davy's assertion that the water of the sea gets sensibly cooler in the vicinity of a sand or shelving shore; I confess however on looking over his Tables the fact seems still dubious, resting generally on an equivocal semi-degree. Dr. Russell and myself could not perceive any influence on approaching the Sandheads, but that may have been prevented perhaps by the strong current from the Hooghly in the month of September.

6. My brother at first asserted, contrary to Dr. Davy that the surface of the sea experienced no change of heat in the night: he has since found however that in very smooth water there is a difference amounting to about one degree between the extremes, which are nearly at sunset and sunrise. Davy calls it 2°.

7. It might be imagined that the three great oceans of the world would present an average of equal temperatures nearly, at equal distances from the equator, but this is far from being the case. The Atlantic is colder than the Indian Ocean, and this (according to Kotzebue) colder than the Pacific. The West South Atlantic exceeds the East in heat by several degrees. Probably all these discrepancies might be explained by due attention to their prevalent winds and currents, or if not, the cause may lay in the different depth of their beds of which we can acquire no certain knowledge. I will conclude by presenting the mean results of three voyages calculated by my brother.

Mean Temperature of the Ocean in the Track of George Prinsep, Esq.

	North Atlantic.		South Atlantic.		South Indian.		North Indian.	
	°		°		°			
Equator, to 19° Lat.	77.8	May.	80.6	June. Longitude 25° West.	76.36	July, Longitude 49° E.	81°.7	August.
Ditto, 23	76.5		80 2		76 17			
Ditto, 37	75.1		75.4		72.9			

Mean Temperatures in the Track of James Prinsep, Esq.

	North Atlantic		South Atlantic.		South Indian.		North Indian.	
Equator to 19° Lat.	77.46	June.	76.68	July. Longitude 17° West.	78.36	August Longitude 75°. E.	81.75	Sept.
Ditto, 23	76.5		76.0		77.0			
Ditto, 37	73.7		71.0		71.5			

Mean Temperatures calculated from the voyage of Kotzebue.

	North Atlantic.		South Atlantic.		South Indian.		North Indian.
	°		°		°		
Equator, to 19° Lat.	80.0		78.79	April. Long. 17° W.	82.04	March?	
Ditto, 23	79.7		77.78		81.77		
Ditto, 35	77.4		75.		79.61		
Ditto, 38					76 85		

APPENDIX II.

No. I.

EXTRACT FROM THE PROCEEDINGS OF THE 26TH DECEMBER, 1822.

Read the following Address to the Most Noble the Marquis of Hastings, President of the Society.

As this is the last occasion, on which the Asiatic Society will assemble under the presiding guidance of your Lordship, we have felt it no less due to your Lordship than to ourselves, to give utterance to the sentiments, which the circumstance irresistibly inspires. We therefore trust your Lordship will allow us, to express our feelings of sincere regret for the loss we are about to sustain : our deep sense of the liberal motives, which induced your Lordship to take a personal interest in our proceedings; and our grateful acknowledgements, of the punctual attention and condescending kindness, which have uniformly characterised your Lordship's discharge of the functions, of President of the Society.

Instituted for objects, that could not fail to receive the encouragement of enlightened rule, the Asiatic Society has boasted from its earliest foundation, the patronage of those distinguished characters, to whose protecting care, the destinies of

British India have been entrusted. With one exception however, that patronage was never converted into a more immediate intercourse, and the very brief period, during which Sir John Shore was President of the Society, can scarcely be considered as constituting that exception. It was reserved therefore for your Lordship, through a series of eventful years, to create leisure from high and arduous labours, to give animation to literature, and vigour to research ; to inspirit the perseverance toiling to elucidate the past and present condition of man, and to foster and encourage the energies, struggling to enlarge the boundaries of science, and to develope the mysteries of nature. The beneficial effects of this condescending liberality, may be traced in the pages of our transactions, and the valuable papers, which have given new animals to Zoology, new plants to Botany, new regions to the Geographer, and events to the Historian, are not more ascribable to opportunity of observation, and ability in the observer, than to the encouragement granted by your Lordship to the one, and the facilities afforded to the other; and they may more especially be attributed to the enlightened promptitude, with which your Lordship has ever befriended their communication to the world.

The dissemination of knowledge is in all cultivated Societies, the worthy occupation of talent and power : even where that knowledge may not be of generally practical application, its possession may be endowed with specific value, and much that is little essential to the necessities of life, is of high value to intellectual ambition. It may be of trifling import to the welfare of any particular community, to discover and adjust the dark traditions of remote antiquity, or to trace through the glimmering of verbal coincidence, concording usages, and corresponding tenets, the bonds by which nations now remote in site, and dissimilar in character, were once identified or allied. To the mind however that is liberalized by studious enquiry, and elevated by expanded views, these subjects are deeply important; and the studies of the scholar, and the speculations of the Philosopher cannot be without their effect upon the improvement of Society, and the happiness of mankind. To pursuits of such a nature, the regions, which we for a time inhabit, present an inviting field, and it would argue an indifference, wholly unworthy of the rank which our native country holds in the scale of refinement, if the British Residents in the East could disregard the opportunities, that are offered to their acceptance, of familiarising themselves with the Languages, Literature, Antiquities and Religion of Asia, the birth place and cradle of the human race.

From such an imputation, therefore, we are proud to assert our exemption and to appeal to the researches for the proofs of a zeal, which has been beneficially exerted in the diffusion of authentic and accurate conceptions of the East; and which has therefore formed our strongest claim to the interest, that your Lordship has been pleased to take in the prosperity of the Society.

Independently however of considerations of a Literary nature, the extraordinary events of a few years have furnished us with new, and still more elevated incentives to study; and have rendered a familiarity with the Languages and Literature of the East, a high political obligation: we owe it to the subjects of our Government to cherish the only literature they possess, until they shall acquire taste for something of more value; and more especially we are bound to obtain a thorough and personal acquaintance with their manners and notions, their prejudices and feelings, their wishes and their wants. The determination to uphold, and fulfil this obligation, has ever marked your Lordship's administration, and has been evinced, not only in the countenance shewn to the Society, but in the aid and approbation offered to enterprising travellers; in the encouragement given to useful publications, and in the reform or foundation of literary establishments. The districts of Western Hindoostan, and the lofty chains of the Himalaya, have been successfully explored: the Arabic College of Calcutta, and the Sanscrit College of Benares, have both received renovated activity. The capital of British India, will in future present to the Hindu population, advantageous means of cultivating their classical learning, and schools scattered throughout the empire, supply to early youth, the sources of improved instruction. European scholars, both in this country and in the West, are indebted to the same liberality for additional facilities offered to the successful prosecution of their studies, and it is no less the theme of their admiration than acknowledgement, that the Kamus, the Burhan Katia, and the only Sanscrit Dictionary yet published, works so essential to the acquirement of the three great Languages of Asia, should all have issued from the Calcutta Press, during the period of your Lordship's Government.

Whilst we thus endeavour to do justice to the enlightened zeal, with which your Lordship has in various ways promoted the diffusion of useful knowledge; we cannot lose sight of the more private relations which we have borne to you, as the President of our Society, or withhold our especial tribute of acknowledgement, for the spi-

rit and manner, in which those relations have been maintained. The punctual attendance of your Lordship has been no less flattering than beneficial; no less indicative of a warm interest in our proceedings, than an example for our imitation, and the amenity and attention with which your Lordship has exercised your official share in the details of our occasional meetings, have invariably impressed the Members present, with the most lively feelings of affection and respect. We have already adverted to the valuable papers of which your Lordship has been the medium of communication, and we are well aware, that we have frequently been indebted for the possession of those compositions to your Lordship's sanction, or suggestion; we have also to express our thanks for the contributions with which your Lordship has enriched our Library and Museum, and for the disposition uniformly shewn, (and of which this evening affords such splendid proof), to improve every favourable opportunity of adding to their stores. The Museum indeed may be regarded as of your Lordship's creation, dating from the period of your Presidency, and having grown up under your care: whilst noticing this part of our obligations, we hope we may be permitted to offer our acknowledgements where they are alike due, and to request, that your Lordship will in the character of our President, undertake the communication of the thanks of the Society, for those proofs of attention which the Museum has experienced from the Marchioness of Hastings.

We have now, my Lord, only to take our final leave, and to express our sincere wishes for your Lordship's future happiness. Unwilling however that the connexion which has so long been our pride and pleasure, should even now be utterly dissolved, we trust we may be allowed to consider your Lordship, still an Honorary Member of our association, and to hope, that the name of the Marquis of Hastings may long continue to shed lustre upon the Asiatic Society.

To which His Lordship was pleased to pronounce the following reply:

GENTLEMEN,

The testimony of approbation and good will with which you have honored me is truly flattering; but it is at the same time keenly affecting. Something sad is inseparable from the expression "this is the last time" as connected with

almost any circumstances. How much more of that character must apply to an occasion where the phrase is to be used towards persons for whom I have cherished the highest esteem and by whom I am now kindly told that I possess their attachment! To have earned that profession from you is an honest pride for me. It is true, I have sought to encourage efforts for the promotion of science, particularly through retrieving the scattered remnants of Indian Literature; and so far I have recommended myself to you. Our late volumes, as you justly observe, will testify that the Society has not been idle. But the existence of such evidence in proof of our active attention to the objects of our association must evince much more the inherent energy of the Institution than the effect of any instigation from me. I will nevertheless urge you not to relax your search amid those ruins which have overwhelmed the records of a country heretofore eminently civilized. I confess that I do not expect any thing directly valuable will be found. Such traces as remain of the antient state of India appear to me as establishing the presumption of progress in mechanical arts rather than in cultivated productions of the mind. The acquisitions, I apprehend, would be found but rough gems: yet the translations which your learned Secretary has this evening read to you from Sanscrit works lately discovered, will prove that the matter, howsoever irregular in its native shape, may become a brilliant decoration when subjected to the polish which genius and refined taste can apply to it. How far any advancement to science may be hoped is not here the question. Perhaps nothing intrinsically novel in any line is attainable. It can hardly be looked for even in works of fancy. Imagination, consisting wholly in various combinations, exaggerations, or distortions of simple known things has obviously its limits, and those boundaries seem to have been reached. There is, however, in different nations a different course of cultivation, so that the conceptions and phraseology of an inferior people may occasionally suggest to a nation high in intellectual attainment modes or constructions which may be adapted to the richer stock with advantage as to embellishment, nay possibly as to strength. While I recommend this industry, I feel some shame at not having as your President offered any contribution to your publications. The deficiency has not arisen from inattention. I can truly say that I had employed much thought and some application to a topic which I imagined would be appropriate to our compilations. An insurmountable obstacle occurred. I was not at the outset aware of the extent in which such a subject must be treated: and, when I found that I could not reserve for the execution of my purpose a

sufficient portion of that time in which my daily duties had a claim never I trust postponed by me, I resolutely abandoned my plan. It is not by way of proving myself to have actually contemplated such a performance, it is to submit the undertaking to the judgement of others that I state the outline of it. A notion has been entertained that the Hindi is a jargon accidentally compounded of many tongues. In speaking of the Hindi, I refer to what I conceive to be the basis of the present Hindustani. This latter dialect has had various adulterations engrafted upon it in different parts of India, while the frame work is intact, bearing all the character of originality. History informs us that Behram Gor issued an edict putting down the use of the vernacular language of Persia and ordering the Deri, the antient form of the present Persic, to be used in it's stead. I am not acquainted with the Parsi; but I am told by the best authorities here that it is a language altogether distinct from the Persic. Now it is clear that the wildest despotism never could think itself capable of extirpating the colloquial medium of a whole people and of substituting for it terms of communication utterly unintelligible to the multitude: yet, had the Parsi been the former language in use throughout the greater part of Persia, it's suppression and the introduction of the Deri would have been the violent measure which I have represented. This consideration led me to reflect whether the Hindi might not have been the language originally prevalent in Persia. When I pursued the thought, numerous corroboratory circumstances appeared to support the belief; so that I now persuade myself the Hindi is the language which spread itself from Iran, eastward to India and westward over a great part of Europe. I forget whether it be Lipsius or Scaliger who remarks an affinity between the Persic and the German. He would have perceived a stronger indication of connection had he pursued the earlier type (the Hindi) through dialects more strictly Gothic. I do not mean the Gothic of Ulphilas's Gospels, which is Mœso-Gothic and evidently corrupted by the adoption of idioms from the borderers on the Roman frontier, but I allude to that branch of the language which kept itself clear from the concourse of various tribes and tongues existing in the Southern Realms. With my confessedly superficial knowledge of both Persic and Hindi, I should have had hesitation in referring to those languages before so many who are thoroughly proficient in them, did I not assure myself it would be perfectly comprehended that an individual working at a language to satisfy himself on particular points in its substance and structure may reach that object howsoever deficient he may be in the ordinary application of the tongue. The strongest ground of convic-

tion with me is, that, supposing the Hindi to have been the current language of the country it had radical ambiguities which Behram Gor might judiciously wish to remedy. It is natural to surmise that he sought to effect this, not (as has been hastily supposed) by a forcible suppression of the dialect in general use, but by exerting the influence of his Court as well as of his public establishments, to which the edict was probably addressed, for procuring the adoption of a connected dialect of the same language, intelligible to all and into which the crowd would gradually slide through the example of their superiors.

For the dilatation of this hypothesis it would have been necessary to bring together a mass of collateral proofs, as well as to show what is the internal evidence of an original language, and what are the cases in which the identity of unconnected words in two languages should furnish inference of the descent of one from the other instead of being ascribed to casual introduction. Each would be a laborious detail, and the scope appeared to me far beyond any leisure I could allot to it. After all, the point may seem little material; yet disquisitions of this sort are seldom without their use. Towards deciding the earlier history of nations they are important. The connection of language powerfully confirms recorded facts which otherwise might be questionable, while the absence of it is a regulation of particulars too lightly admitted into annals.

Here I must stop. The cessation is painful, because it reminds me of the word I have to pronounce. Farewell. I do not utter it as a common place formulary of leave-taking, but with that earnest wish for the welfare of each of you which must be prompted by all you have taught me to feel towards you.

Resolved, That these proceedings be printed in the Appendix of the volume of the Researches now in the Press.

No. II.

RULES OF THE ASIATIC SOCIETY.

THE following is an abstract of the Rules of this Institution, which are now in force; including those printed in the Appendix to the sixth and subsequent Volumes of the Society's Transactions.

Original Rules adopted from the Founder's Discourse, 15th February, 1784.

1. The Institution shall be denominated the *Asiatic Society:* the bounds of its investigations will be the geographical limits of *Asia;* and within these limits, its enquiries will be extended to whatever is performed by man or produced by nature.

2. Weekly Meetings shall be held for the purpose of hearing Original Papers read, on such subjects as fall within the circle of the Society's enquiries.

3. All curious and learned men shall be invited to send their Tracts to the Secretary; for which they shall immediately receive the thanks of the Society.

4. The Society's Researches shall be published annually, if a sufficiency of valuable materials be received.

5. Mere Translations of considerable length shall not be admitted, except of such unpublished Essays or Treatises as may be transmitted to the Society, by Native Authors.

6. All questions shall be decided on a ballot, by a majority of two-thirds, and nine Members shall be required to constitute a Board for such decisions.

7. No new Member shall be admitted who has not expressed a voluntary desire to become so; and in that case, no other qualification shall be required, than a love of knowledge, and a zeal for the promotion of it.

Subsequent Resolutions of the Society, which are in force.

8. The future Meetings of the Society shall be held on the first *Wednesday* of each alternate Month, at eight o'clock in the evening.

9. If any business should occur to require intermediate Meetings, they may be convened by the President; who may also, when necessary, appoint any other day of the week, instead of *Wednesday*, for the stated Meetings of the Society.

10. As it may not always be convenient for the President to attend the Meetings of the Society, a certain number of Vice-Presidents shall be elected annually.

11. In case the President and the Vice-Presidents are absent at any meeting, a quarter of an hour after the fixed time, the Senior Member present shall take the Chair for the evening.

12. Every Member of the Society shall have the privilege of introducing, as a Visitor, any Gentleman who is not usually resident in *Calcutta.*

13. With a view to provide Funds for the necessary expenses of the Society, an Admission Fee shall be established to consist of Two Gold Mohurs, payable by every Member on his election; and each Member of the Society, resident in *India,* (honorary Members excepted,) shall also contribute a Gold Mohur quarterly, in the first week of *January, April, July,* and *October.* Any Member neglecting to pay his Subscription, for half a year after it becomes due, to be considered as no longer a Member of the Society.

14. All Members returning to India, shall be called upon to pay their Subscription as usual from the date of their return.

15. A Treasurer shall be appointed.

16. In addition to the Secretary, an Assistant Secretary, and a Librarian, shall be also appointed.

17. A Committee of Papers shall be appointed, to consist of the President, Vice-Presidents, Secretary, and nine other Members, to be elected annually; and any number no less than five, shall be competent to form a Committee.

18. This Committee will select from the Papers communicated to the Society such as may appear proper for publication; and superintend the printing of the Society's Transactions.

19. The Committee of Papers shall be authorized to draw upon the Treasurer for any sums requisite to defray the expense of publishing the Transactions; and an order, signed by a majority of the Committee, will be a sufficient warrant to the Treasurer for paying the same.

20. The Committee of Papers is authorized to defray any small Contingent Expenses on account of the Society, which they may deem indispensable.

21. Every subscribing Member of the Society on application, shall be furnished with a copy of such volumes of the Researches as may be published whilst he continues a Member, in return for his contributions, without any further payment.

22. With a view to the more general circulation of the *Asiatic* Researches in *India,* the price of the 12th and future Volumes, to non-subscribers, shall be fixed at a Gold Mohur, and if several volumes of different years be purchased together, they shall be sold at Ten Rupees each.

23. The Agents of the Society in *England* shall be desired to purchase and forward for the Society's Library, Books of Science and Oriental Literature published in *Europe,* according as the Funds of the Society will permit.

24. The Committee of Papers shall be requested to furnish the Agents in *Europe,* with such further instructions as may appear requisite for their guidance in the selection of Books proper to be placed in the Library of the Society.

LIBRARY.

25. The Library is open from 10 to 4 o'Clock, between which hours, the Native Librarian is to be in attendance every day, Sunday excepted.

26. None but the Members of the Society are allowed to borrow Books from the Society's Library, and no Book is to be lent out of Calcutta without especial permission from the Committee of Papers.

27. Books are to be borrowed by written or personal application to the Secretary: in either case, the person applying is to furnish a written receipt, specifying the name of the work, and the time for which it is borrowed, at the expiration of which, he is to return the Book borrowed or renew his application for an extended loan of it.

28. The Receipts for the Books shall be filed, and a Record kept of the Books lent out, to whom, and when lent out, and when returned.

29. A list of the Books in the Library, and a Register of those lent out, are to be kept ready for inspection.

30. All persons borrowing Books, are to be answerable for their safe return, or are expected to replace them, if injured or lost.

MUSEUM.

31. On the 2d *February*, 1814, the Society determined "upon forming a Museum for the reception of all Articles that may tend to illustrate Oriental Manners, and History; or to elucidate the particularities of Nature or Art in the East." The following Resolutions were at the same time passed upon the subject.

32. That this intention be made known to the public, and that Contributions be solicited of the undermentioned nature:

1. Inscriptions on Stone or Brass.
2. Ancient Monuments, *Mohammedan* or *Hindu*.
3. Figures of the *Hindu* Deities.
4. Ancient Coins.
5. Ancient Manuscripts.
6. Instruments of War peculiar to the East.
7. Instruments of Music.
8. The Vessels employed in Religious Ceremonies.
9. Implements of Native Art and Manufacture, &c. &c.
10. Animals peculiar to *India*, dried or preserved.
11. Skeletons or particular Bones of Animals peculiar to *India*.
12. Birds peculiar to *India*, stuffed or preserved.
13. Dried Plants, Fruits, &c.
14. Mineral or Vegetable Preparations in Eastern Pharmacy.
15. Ores of Metals.
16. Native Alloys of Metal.
17. Minerals of every description, &c. &c.

33. That the Hall on the ground floor of the Society's House be fitted up for the reception of the Articles that may be procured. The Plan and expenses of so doing to be regulated by the Committee of Papers and Secretary; and the Person under whose Superintendance the Museum may be placed.

34. That the expense which may be incurred in preparing Materials, furnished in a state unfit for preservation, be defrayed by the Society, within a certain and fixed extent.

35. All Articles presented to the Museum, shall be delivered in the first instance to the Superintendent of the Museum, to enable him to make the acknowledgement directed in the Standing Rules of the Society.

36. A Register of Donations to the Museum, shall be exhibited at each Meeting of the Society.

37. The Committee of Papers shall adopt such means as may appear proper, for making the intentions of the Society in this respect generally known.

38. The names of Persons contributing to the Museum or Library of the Society shall be hereafter published at the end of each volume of the *Asiatic* Researches.

BIBLIOTHECA ASIATICA.

The following Resolutions were passed, on the recommendation of the Committee of Papers, under date the 2d *July*, 1806, but materials have not yet been received for publishing a Volume of the Work therein proposed.

39. That the Society publish, from time to time, as their Funds will admit of it, Volumes distinct from the *Asiatic* Researches, Translations of short Works in the *Sanscrit* and other *Asiatic* Languages, or Extracts and descriptive Accounts of Books of greater length in those Languages, which may be offered to the Society, and appear deserving of publication.

40. That as this Publication may be expected gradually to extend to all *Asiatic* Books, of which copies may be deposited in the Library of the Society, and even to all Works extant in the learned Languages of *Asia*, the series of the Volumes be entitled *Bibliotheca Asiatica*, or a Descriptive Catalogue of *Asiatic* Books, with Extracts and Translations.

Physical and Literary Committees.

41. At the suggestion of one of the Members of the Society, it was resolved, on the 7th *September*, 1808; *First*. That a Committee be formed to propose such Plans and carry on such Correspondence as may seem best suited to promote the knowledge of Natural History, Philosophy, Medicine, improvements of the Arts, and whatever is comprehended in the general term of *Physics*; to consist of such Members as may voluntarily undertake to meet for that purpose. *Secondly*. That a Committee

be formed in like manner, for Literature, Philology, History, Antiquities, and whatever is comprehended under the general term of *Literature.*

42. The following Rules for the two Committees were also adopted by the Society, on the 5th *October,* 1808:

43. That the Meetings of the Literary Committee be held at the House belonging to the *Asiatic* Society, on the first and third *Wednesdays,* and the Meetings of the Physical Committee on the second and fourth *Wednesdays* of each Month, at the hour of Nine o'Clock in the Evening: whenever a general Meeting of the *Asiatic* Society may be held on the same evening, and at the same hour, the Meeting of the Committee to be suspended. 2d. That each Committee be open to all Members of the *Asiatic* Society, who may chuse to attend the Meetings. 3d. That if the President of the Society be present at a Meeting of either Committee he shall preside; in his absence one of the Vice-Presidents, and in their absence the eldest Member of the Society present at each Meeting shall be considered as President at such Meeting. 4th. That the Secretary to the *Asiatic* Society be requested to act as Secretary to the Literary Committee, and the Assistant Secretary to the Society be requested to act as Secretary to the Physical Committee, as far as their time and avocations may admit. 5th. That a Deputy Secretary be also appointed for each Committee, to be elected at the next Meeting of the two Committees respectively. 6th. That regular Books of Proceedings be kept by the Secretaries for each Committee, in which Minutes shall be entered of all Papers, Communications, and Acts done by the Committee; that such Books be at all times open to the inspection of the Members of the *Asiatic* Society; and that such Papers be laid before the Society as the Committee may judge proper to be submitted. 7th. That the Correspondence of each Committee be in general carried on through its Secretary or Deputy; but that it be at the discretion of the Committees to employ any one of their Members to correspond with any individual.

On the 9th February, 1825, it was Resolved,

44. That the Physical Committee assemble on the first Wednesday of each month, alternately with that on which the Meeting of the Society is held.

H. H. WILSON, *Sec. A. S.*

No. III.

List of the Donors and Donations to the Museum of the Asiatic Society, from January, 1822.

Honorable J. ADAM, Esq.—Three silver Coins of Mahmúd Sultan of Malwa.

J. ADAM, Esq. M.D. in the name of Captain Webster.—Specimen of Lava from Barrow Island.

American Philosophical Society of Philadelphia.—Cast of Bones of the leg and foot of the Megalonix or Great Claw.

W. B. BAYLEY, Esq. in the name of H. B. HODGSON, Esq.—Specimen of Woollen Cloth. Ditto of Crystal. Ditto of Metallic Ores. Several Salgram Stones. A Siva Linga. A Prayer Cylinder from Nepaul.

J. BENTLEY, Esq. in the name of Capt. BALES.—A long haired female Goat.

C. F. BROOMLEY, Esq.—A number of Clubs and Spears used by the Natives of New Zealand.

MONS. CASANOVA.—Specimen of Lava from the Isle De Bourbon.

CAPT. CORNFOOT.—Skin and extremities, parts of the head and neck, of a large Ape killed on the North Coast of Sumatra.

MR. CONOLLEY.—A set of Mr. Conolley's portable Telegraphic signals by sea and land.

CAPT. COX.—A Copper Spear Head found on the plains of Mathura.

G. CHESTER, Esq.—Three ancient Mohammedan Coins, two of the reigns of Mahmud of Bengal.

MONS. DUVAUCEL.—Several species of Snakes in spirit. A stuffed Delphinus Gangeticus. Several stuffed Birds.

CAPT. EASTGATE.—A perfect stuffed Albatross. The head and wings of another ditto. A Cape Hen. A Booby Bird. A Pintado or Cape Pigeon.

PROFESSOR FISCHER, of Moscow.—Specimens of Turquoise.

MR. FLATMAN.—A species of Lizard caught in the woods of Baneoora.

MR. FORSTER.—A young Kid with seven legs.

LIEUT. COL. FRANKLIN.—An ancient Coin.

W. L. GIBBON, Esq.—Specimens of Agates. Two Coral Trees on stands. A Monkey from Sincapoor in spirit. Several Minerals from Java. Model of a Lusus Naturæ at Lucknow. Two Models of hollow Garden walls as constructed in England, and a specimen of the Bengali mode of foliating glass globes with lead. An artificial Wax Candle. A Hindustani Matchlock. Specimen of Serpula Polythalamia. The Murex Tritonus. A young Alligator. A Crab Shell.

GEN. HARDWICKE in the name of MAJOR GALL and MR. SEWELL.—A stuffed Albatross. A double headed Buffalo Calf; with a description and drawing of the latter.

GEN. HARDWICKE.—Model of a Malay War Prow. Two Head Dresses. Two mother-of-pearl shell Ornaments of New Zealand Chiefs. A Chinese hat of a particular construction. The hat of a Kamschatkan. The Mushroom shaped Madrepore from the straits of Rama which divide the Island of Ceylon from the Peninsula of India. The horns of a Deer common to many parts of India called Bara Singa.

CAPT. HERMAN.—Sundry Snakes and Reptiles in Alcohol.

T. HEWETT, Esq.—A dried flying Fish.

H. B. HODGSON, Esq.—Specimens of woollen cloth, crystal metallic ores, Salgram stones, jantras, prayer cylinders, images, domestic utensils, and other articles from Nepaul. Specimen of the hair of the Cherú or supposed Unicorn and impression of his hoof. Specimen of the wool of the Nowa or mountain Sheep.

Hon. Capt. Keppel.—A Babylonian Brick.

Mr. J. Kyd.—A large jaw bone of a whale. A number of large Barnacles from the bottom of a Ship. Specimen of a King Crab. Tooth of the Saw Fish.

J. P. Larkins, Esq.—A large block of Petrified wood found in digging the foundations for a house near the Government House in Calcutta.

Sir C. T. Metcalfe.—Two ancient gold Coins from Warankal.

Mr. Mitchell.—A curious Insect found in the hollow of a tree.

W. Nisbet, Esq.—Specimens of the Meteorolite that fell near Allahabad in 1822.

S. Nicolson, Esq.—Two Clay Figures of Hindu Ascetics.

J. Palmer, Esq.—A dried Head of a New Zealand Chief. A piece of marble from the ruins of Carthage. A Fossil from Devonshire with an impression. Spears of different kinds from Goonungoopur. Wooden War Club from ditto. Wooden Club for the days of festival from ditto. Necklace of seeds and shells from ditto. Bracelets of Boars' Tusks from ditto. Numerous kinds of Female Ornaments from do. Fishing Lines and Hooks from ditto. A Smoking Pipe from ditto.

Philosophical Society of Yorkshire.—A box containing specimens of the strata of England.

The President of the Asiatic Society.—A number of horns of the Tibet tailless Deer.

Professor Reinhardt.—Stuffed birds from the Royal Museum of Natural History of Copenhagen.

Lieut. H. Robinson.—A Horn of the Unicorn of Nepaul. Four ancient copper Coins. Four small Images of wood, earth and lead. One seal of iron. Another ditto of wood. One stone Die. A sling made of the Hair of the Yak. An iron spoon made at Lassa. A small specimen of gold ore from Lassa. Butan Wax in its crude state. Several Bhotia Jantras. A small Ammonite. Some Bhotia Coins. Some original delineations of the body. A common seal of brass. A lock and key of peculiar construction manufactured at Lassa. Two Horns of a species of Antelope.

J. T. ROBINSON, Esq.—Two ancient Coins from Nasirabad.

G. J. SIDDONS, Esq. in the name of Mr. ROGERSON.—A large snout of a sword fish. Skin of a Giraffe.

G. J. SIDDONS, Esq. in the name of Mr. WOOD.—Skins of the Eyland. Three Bucks. Three Seals.

MAJOR SACKVILLE.—Three ancient Coins.

G. SKIPTON, Esq.—A box of Minerals from the Giant's Causeway, Ireland.

F. P. STRONG, Esq.—Two pebbles from Van Dieman's land. A Lusus Naturæ. Images of Budha from Rangoon.

CAPT. STEAD.—Head of a New Zealander.

GEN. STEWART.—A Stone Bull from Java. Another ditto from Calinjer with a Sanscrit Inscription. A stone slab from Ajaya Gerh in Bundelkhand with Sanscrit Inscription. Two ditto from Burro Pitari near Bhilsa with ditto. Another ditto from Oudipoor near ditto. Another ditto from Mahoba in Bundelkhand near ditto. Two Stones from Bhuvaneswara in Orissa with Sanscrit Inscriptions. One ditto from Ajaya Gerh.

G. SWINTON, Esq.—A copper Axe head found in the earth at Bithur.

DR. THOMAS.—Two large Images of Budha.

MISS TYTLER.—Model of a Hindustani Chatta. Ditto Loom for weaving coarse canvas. Ditto ditto Blanket. Two pair of Lac bracelets. Model of a drill for cutting bones. Ditto Lancet for making incision into poppy heads. Ditto of Blacksmith's forge and bellows with two anvils. Ditto Instruments for Drawing circles on the ground with Carpenter's Hatchet and Saw. Model of an Apparatus for making paper. Ditto a double Boat. Ditto for Catching Birds. Ditto Steel yard. Ditto of a Hooka. A stone shot from the ruins of Samram Gher. Model of a Native Carriage. Model of a Mosque. Ditto of a temple in Nepaul. Ditto of a Granary. Ditto of an Eka Gari. Ditto of a Grinding stone. Ditto of a Frame for making Tallow Candles.

Dr. R. Tytler.—Specimen of a horned fly found near Azim Gerh. A suit of armour. Two Hindu Images and Rosaries. Specimens of Volcanic Minerals from Java. A case of poisoned arrows from the Poggy Islands. Two Lingams with sculpture. A number of different Images. Views of the *Taj* and *Kuteb Minar*. A native Portrait of *Nur Jehan*. Two small dried Alligators. Two Cranias with singularly diversified sutures. Several curious Salgram stones. An Aerolite. A large stone in three pieces.

Mr. Webster.—Two Otaheiti Paddles.

Rev. J. Yaul.—Two boxes of Fossils from New South Wales.

T. Yeld, Esq.—Petrefaction of a part of the stem of a Palm tree.

No. IV.

List of the Donors and Donations to the Library of the Asiatic Society, from January, 1822, to July, 1825.

American Academy of Arts and Sciences.—The 2d part of the 4th volume of the Memoirs of American Academy of Arts and Sciences.

Society of Arts, Sciences, &c.—Transactions of the Society for the Encouragement of Arts, Sciences, &c. vols. 27, 39, 40 and 41.

Antiquarian Society.—Antiquariæ Societatis Archæologia, vol. 14 to 16; 18, 19, part 2, and vol. 20th, part 2d.

Astronomical Society of London.—Transactions of the Astronomical Society of London, vol. 1st, part 1 and 2.

ASIATIC SOCIETY OF PARIS.—Journal Asiatique Number from 1 to 7, 9 to 11, 12 to 20 and 21—24 with the Opening and Anniversary Discourses from 1822—1824.

COL. AGNEW.—Fac-simile of Inscriptions at Raju Lochan.

ALI AKBER KHAN.—Makhzan ul Advia; Persian.

MR. W PARNFIELD.—Catalogue of the Books of Messrs. Longman, Hurst and Company's Library.

REV. B. BRIDGE.—Theory and Solution of Cubic and Biquadratic Equations.

THE ROYAL ACADEMY OF CAEN.—Various Reports and Memoirs.

PROFESSOR CIRBIED.—Grammaire De la Langue Armenienne.

CAMBRIDGE PHILOSOPHICAL SOCIETY.—The first number of the Transactions of the Cambridge Philosophical Society.

MR. CHEVALIER.—Hunterian Oration for 1821.

PROFESSOR FISCHER.—Essai sur la Turquoise et sur la Calaite.

COUNCIL OF THE MADRAS COLLEGE.—Grammar of the Telugu language by A. D. Campbell, Esq. A Dictionary of ditto by ditto. Grammar of the Carnatic language, by J. McKerrell, Esq. Telugu Fables. A new edition of Beschi's Tamul Grammar. A Treatise on Arabic Syntax by Maulavi Torab Ali.

MR. J. CONOLLY.—Philanthropic Vocabulary.

MONS. LE BARON DE FERUSSAC.—Tableaux Systematiques des Animaux Mollusques. Monographie des especes vivantes et fossiles du genre Melanopside, and several papers on the collection and preservation of Shells.

MONS. JACQUES GRABERG DE HEMSO.—Theorie de la Statistique. Leçons Elementaires de Cosmographie et de Statistique. Precis de la Literature Historique du Moghrib ool Aksa or Morocco. Saggio Istorico su gli Scaldi Antichi Poeti Scandinavi. La Scandinavie vengée. Annali di Geografia edi Statistica, 2 vols. Della Statistica in Italia. De Natura et Limitibus Scientiæ Statisticæ. Lettre sur la Peste de Tanger en 1818—1819.

PROFESSOR FRANK.—Grammar of the Sanscrit Language.

EDINBURGH ROYAL SOCIETY.—Transactions of the Royal Society of Edinburgh, volumes 6, 7, 8, 9, and 1st part of 10.

PROFESSOR FRAEHN.—Description of the Potosian Cabinet of Oriental Coins. An Essay on ancient Bulgharian Coins. Description of the Cabinet of Oriental Coins of the Imperial Academy of Science at Petersburgh, first part, (Latin, 1818.) The same, (German, 1821.) Observations on some rare Mohammedan Coins at Petersburgh. Ancient Mohammedan Monuments. On the Khazars from the Arabic Authors. On the Bashkirs. On the Persian Coins of the early Khalifs.

GEOLOGICAL SOCIETY.—Transactions of the Geological Society, from the 1st to the 5th vol. part 1st, and part 1st, vol. 1st of the second series.

THE GOVERNMENT OF BOMBAY.—Statistical Reports on the Purgunnahs of Padshahpoor, Belgam, &c. by T. Marshall, Esq.

GOVERNMENT OF MADRAS.—Report of the length of the Pendulum at the Equator by Mr. Goldingham. Astronomical observations at the Observatory Madras, vol. 3d.

COL. HARRIOTT.—Observations on Pauperism and Poor Laws.

HORTICULTURAL SOCIETY.—Transactions of the Horticultural Society, vol. 1 to 5. Report of the Garden Committee of the Horticultural Society. A list of the Members of ditto, &c.

LIEUT. HEPBURNE.—A Bhasha version of part of the Mahabharat.

VON HAMMER.—A copy of Euclid's Elements in Arabic printed at Rome in 1600. Geography of Constantinople and the Bosphorus. Nos. 13—17 and 21—24 of the Jarbucher der Literatur. The 1st, 2d & 4th Numbers of the 6th vol. of the Mines de l'orient. Roll of Papyrus. Memoir of the two last Counts of Purgstall. Translation of Motanabi in German verse.

B. H. HODGSON, Esq.—A large collection of Jantras. Pictures of Maha Kali, in various forms with and without a *Sacti.* Emblems and prayers addressed to the Agent of Death, in the event of sickness. Pictures exhibiting the Grand

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359	14	Majika	Májan.
—	19	Súdúr	Lúdúr.
360	1	7,318	8,318.
—	3	Raba	Ríba.
361	2	Shabeng	Shilang.
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362	9	omit, "We left Moorung at 10 o'clock."	
—	23	After acid, a full stop.	
363	9	12,388	12,860.
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—	—	Fehling	Tehling.
398	1	Chani	Chíní.
—	16	8551	9226.
—	21	Raba	Riba.
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